A STUDY ON THE SYMPTOMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

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DECLARATION BY THE CANDIDATE

I hereby declare that this Dissertation entitled ***"A STUDY ON THE SYMPTOMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM"*** is a bonafide and genuine research work carried out by me under the guidance of **Dr.M.Ramamurthy M.D(S), Lecturer,** Dept of Noi Naadal, National Institute of Siddha, Chennai – 47, and the dissertation has not formed the basis for the award of any other degree, Diploma, Fellowship or other similar title.

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Date: 29.06.2018

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BONAFIDE CERTIFICATE

Certified that I have gone through the dissertation submitted by **Dr.B.K.Priya (Reg.No: 321515204)** a bonafide student of final year M.D(s), Branch-V, Department of Noi Naadal, National Institute of Siddha, Tambaram Sanatorium, Chennai - 47, and the dissertation work has been carried out by the individual only. This dissertation does not represent or reproduce the dissertation submitted and approved earlier.

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INDEX

1. INTRODUCTION

The medical education was a mysterious process of initiation and apprenticeship in the top, where there were two wings; One, concentrating upon theory, doctrine and systems the other, remaining with the sick people concentrating on studying the diseases and patients by methods of physical examination, taking comprehensive, as well as accurate, accounts of their illness by intensive observation. The one we may call scientists; the other practitioners.

Indian traditional medicine does not mean any single system of cure. It consists of different type supernatural, natural, empirical and therapeutic system of cure. Siddha system of medicine, one of the ancient, traditional Indian systems of Medicine has its unique diagnosing methods, therapeutics and treatment procedure. Siddha system of medicine is a more complete, compact and multifarious system of scientific treatment.

The Siddhars were a class of popular writers in Tamil in all its branches of knowledge; and many of their works were written in what is called high Tamil. The kavi or poetry in which the medical and other scientific tracts have been composed is much admired by those who have made it their special study. The Siddhars were further the greatest scientists in ancient times. They were men of higly cultured intellectual and spiritual faculties combined with supernatural powers.

`The great Siddhar Therayar in his famous Venba described the prerequisites of the best physician as follows,

"நோயறிந்து நோய்முதலி நோக்கறிந்து நோயுதவு
தாயறிந்து போக்கும் தரமறிந்து - காய நிலை
நொந்தழியா வண்ண நுகர்விப்பார் நோயினர்க்கு
தந்தை யெனு நற்பண்டிதர்"

- தேரையர் வெண்பா - 636

The meaning of the above poem is that identification of disease, and the primary causes along with knowing the factors that help the spreading of the disease and the ways of protecting the patient, without undergoing much difficulty are essential to become a great physician.

The need for diagnosis, the methods and instructions for the physician have been very very important. Emphasis has been laid on the paramount necessity for understanding the patient and his ailments from a study and observation of external and

internal conditions under which he is placed. The external causes may be due to the excessive and the perverted use of the special senses, The body, the mind, the seasonal variations, the natural disadvantages of age. The importance of internal causes cannot be undervalued, for they produce tangible effects upon the engines of the human body, and individuals vary in their adjustment of this.

Eight methods have been suggested for arrivingthe Diagnosis. These eight measure the position of the patient in his relation to the control of the Vatha, Pitha, Kaba energies which have their being and movement in the physical frame. They are Naadi, Sparisam, Naa, Niram, Mozhi, Vizhi, Malam and Moothiram.

The words of Siddha are indeed difficult to interpret and to be translated effectively in a foreign medium. It has been described that the number of diseases comes upto 4448. They have classified them as those affecting the different parts of the body. In fact they have brought within their range of vision almost all kinds of diseases. They have enunciated the principles of these diseases and described the main source of the origin and spread of the diseases on regarding to the three humours. A complete examination of their analysis and description will be necessary.

Siddhars classified the diseases into 4448 types based on three humours theory. Among them Vatha diseases are 80, Pitha diseases are 40 and Kaba diseases are 20 in number. Vanni Pitham is one amongst the 40 types of Pitha diseases. It is characterized by Abdominal pain, Fever, Bloody diarrohea with mucus, Paleness (anaemia), Dizziness or Weakness, Anorexia and Glossitis with Sour taste of the tongue. Vanni Pitham is the condition mentioned by Sage Yugi which closely resembles the Inflammatory Bowel Disease mentioned in modern medical literature.

Ulcerative colitis and Crohn’s disease are chronic inflammatory bowel diseases which pursue a protracted relapsing and remitting course, usually extending over years. The incidence of inflammatory bowel disease varies widely between populations, Crohn’s disease appears to be very rare, yet ulcerative colitis although still unusual, is becoming more common. The incidence of ulcerative colitis is stable at 10 per 100000 while that of Crohn’s disease is increasing and is now 5 -7 per 100000. Both diseases most commonly start in young adults, with a second incidence peak in the seventh decade.

It is important to elaborate the disease Vanni Pitham mentioned in the literature, to get a better insight and valid explanation. So that, this study might form the basis for the management and evaluation of the diagnostic methodology including the validation of the literature.

2. AIM & OBJECTIVES

2.1 AIM

- To evaluate the diagnostic Methodology and Symptomatology of the disease " Vanni Pitham".

2.2 OBJECTIVES:

- To establish the clinical courses of the disease, with the keen observation of Etiology, Pathology and Diagnosis.
- To analyse the present three humoural status **(**Mukkutra vaagu**)** and somatic constitution **(**Udal vaagu**)** of the patients.
- To establish the vitiation of Muththathukkal.
- To highlight the Envagaithervu (Siddha diagnostic methods).
- To correlate the symptoms of "Vanni Pitham" with that of closely resembling conditions in modern medical literature.
- To enlighten about patho physiology for Vanni Pitham with modern pathological concept of Inflammatory bowel disease.
- To analyze the line of treatment and to recommend dietary regimen for Vanni Pitham.

3.A. SUGARANA NILAI IN SIDDHA MEDICINE (PHYSIOLOGY)

The five basic elements, namely Aagayam (Space), Kaal (Air), Thee (Fire), Neer (Water), and Mann (Earth) are the building blocks of all the physical and subtle bodies existing in this whole universe. These are called as the 'Adippadai boothams' (Basic Elements) (or) 'Panchaboothams'.

These five elements altogether constitute the human body and also the origin of other materialised objects, explained as Pancheekaranam (Mutual Intra Inclusion). None of these elements could act independently by themselves. They could act only in co-ordination with other four elements. All the living creatures and the non-living things are made up of these five basic elements.

உலகம் பஞ்ச பூதம்

"நிலம் நீர்தீவளி விசும்போடைந்தும்
கலந்தமயக் கமுலகம் மாதலின்"

-தொல்காப்பியம்

தேகம் பஞ்ச பூதம்

"தலங்காட்டி இந்தச் சடமான ஐம்பூதம்
நிலங்காட்டி நீர் காட்டி நின்றிடுந் தீ காட்டி
வலங்காட்டி வாயுவால் வளர்ந்தே இருந்த
குலங்காட்டி வானில் குடியாய் இருந்ததே"

-பதிணென் சித்தர் நாடி சாஸ்திரம்

As per the above lines, the universe and the human body are made of five basic elements.

A.THE 96 BASIC PRINCIPLES (96 THATHUVAM):

According to siddha system of medicine, 'Thathuvam' is considered as a science that deals with basic functions of the human body. Siddhars described 96 principles as the basic constituents of human body that include physical, physiological, psychological and intellectual components of an individual. These 96 Thathuvams are considered to be the cause and effect of our physical and mental well-being. The Thathuvam is the author of the conception of human embryo on which the theory of medicine is based.

1. BOOTHAM – 5 (ELEMENTS):

- Mann - Earth
- Neer - Water
- Thee - Fire
- Vaayu - Air
- Aagayam - Space

2. PORI -5 (SENSORY ORGANS):

- Mookku (Nose) - It is a component of Mann bootham
- Naakku (Tongue) - It is a component of Neer bootham
- Kan (Eye) - It is a component of Thee bootham
- Thol (Skin) - It is a component of Vaayu bootham
- Kadhu (Ear) - It is a component of Aagayam bootha

3. PULAN -5 (FUNCTIONS OF SENSORY ORGANS):

- Nugarthal - Smell : It is a component of Mann bootham
- Suvaithal - Taste : It is a component of Neer bootham
- Paarthal - Vision : It is a component of Thee bootham
- Thoduthal - Touch : It is a component of Vaayu bootham
- Kettal - Hearing : It is a component of Aagayam bootham

4. KANMENTHIRIYAM – 5 (MOTOR ORGANS) AND KANMAVIDAYAM

- Vaai (Mouth) – Vasanam - Vaaku - The speech occur in relation with Space element
- Kaal (Leg) - kamanam- Paadham -The walking take place in relation with Air element
- Kai (Hands) – Dhaanam – Paani - Giving and taking are carried out with Fire element
- Eruvai (Rectum) – Visarkam - Paayuru -The excreta is removed in association with Water element
- Karuvai (Genital organ) – Aanandham – Ubastham - Sexual acts are carried out in association with Earth element

5. KARANAM – 4 (INTELLECTUAL FACULTIES)

- Manam – Thinking about a thing
- Bhuddhi – Deep thinking or analysing of the thought
- Siddham – Determination to achieve it
- Agankaaram – Achievement faculty

6. ARIVU – 1 (WISDOM OF SELF REALIZATION)

- To analyse good and bad.

7. NAADI -10 (Channels of Life Force responsible for the Dynamics of Life energy**)**

- Idakalai – Starts from the right big toe and ends at the left nostril.
- Pinkalai – Starts from the left big toe and ends at the right nostril.
- Suzhumunai – Starts from moolaathaaram & extend upto centre of head.
- Siguvai – Located at the root of tongue, helps in swallowing food.
- Purudan – Located in right eye.
- Kanthari – Located in left eye.
- Aththi – Located in right ear.
- Alambudai – Located in left ear.
- Sangini – Located in genital organs.
- Gugu – Located in anorectal region.

8. VAAYU – 10 (Vital nerve force which is responsible for all kinds of movements**)**

- **PRANAN (UYIR KAAL):**

  This is responsible for the respiration of the tissues, controlling knowledge, mind and five sense organs and digestion of the food taken in.

- **ABANAN (KEEL NOKKU KAAL):**

  It lies below the umbilicus. It is responsible for the downward expulsion of stools and urine, ejaculation of semen and menstruation, child birth.

- **VIYANAN (PARAVU KAAL):**

  This is responsible for the motor and sensory functions of the entire body and the distribution of nutrients to various tissues.

- **UTHANAN (MEL NOKKU KAAL):**

  It originates at utharakini. It is responsible for digestion, absorption and distribution of food. It is responsible for all the upward movements.

- **SAMANAN (NADUKKAL):**

  This is responsible for the neutralization of the other 4 valis, i.e. Pranan, Abanan, Viyanan and Uthanan. Moreover it is responsible for the nutrients and water balance of the body.

- **NAAGAN:**

  It is a driving force of eye balls and responsible for their movements.

- **KOORMAN:**

  It is responsible for the opening and closing of the eyelids and also vision. It is responsible for yawning.

- **KIRUKARAN:**

  It is responsible for the salivation of the tongue and also nasal secretion. Responsible for cough and sneezing and induces hunger.

- **DEVATHATHAN:**

  This aggravates the emotional disturbances like anger, lust and frustration etc. As emotional disturbance influence to a great extent the physiological activities, it is responsible for the emotional upsets.

- **DHANANCHEYAN:**

  Expelled after 3 days of death by bursting out of the cranium. It is responsible for edema, plethora and abnormal swellings in the body in the pathological state.

9. ASAYAM – 5 (VISCERAL CAVITIES):

- **Amarvasayam** (Reservoir organ): Stomach (digestive organ). It lodges the ingested food.
- **Pakirvasayam** (Digestive site): Small intestine. The digestion of food, separation and absorption of saaram from the digested food are done by this asayam.
- **Malavasayam** (Excretory organ for the solid waste): Large Intestine, especially rectum. Responsible for the expulsion of undigested food parts and flatus.

- **Salavasayam** (Excretory organ for the liquid waste): Urinary bladder, kidney. Responsible for the formation and excretion of urine.
- **Sukkilavasayam** (Genital organs): Place for the formation and growth of the sperm and ovum.

10. KOSAM – 5 (FIVE STATES OF THE HUMAN BODY OR SHEALTH):

- **Annamaya Kosam** – physical Sheath (Gastro intestinal system)
- **Prnamaya Kosam** – Respiratory Sheath (Respiratory system)
- **Manomaya Kosam** – Mental Sheath (Cardio vascular system)
- **Vignanamaya Kosam** – Intellectual Sheath (Nervous system)
- **Anandhamaya Kosam** – Blissful Sheath (Reproductive system)

11. AATHARAM – 6 (STATIONS OF SOUL):

- **MOOLADHARAM :**

  Situated at the base of the spinal column between genital organ and anal orifice. Letter "ஓம்" is inscribed.

- **SWATHITANAM :**

  Located 2 finger breadths above the Mooladharam, (i.e) between genital and naval region. Letter "நா" is inscribed. Earth element attributed to this region.

- **MANIPOORAGAM :**

  Located 8 finger breadths above the Swathitanam, (i.e) at the naval center. Letter "மா" is inscribed. Element is Water.

- **ANAKATHAM :**

  Located 10 finger breadths above Manipooragam, (i.e) location of heart. Letter "சி" is inscribed. Element is Fire.

- **VISUTHI :**

  Located 10 finger breadths above the Anakatham (i.e) located in throat. Letter "வா" is inscribed. Element is Air.

- **AAKINAI :**

  Located between two eyebrows. Element is Space. Letter "யா" is inscribed.

12. MANDALAM- 3 (REGIONS):

- **Thee Mandalam** (Agni Mandalam) Fire zone

  Fire Region, found 2 fingers width above the Mooladharam.

- **Gnayiru Mandalam** (Soorya Mandalam) Solar zone

  Solar Region, located with 4 fingers width above the umbilicus.

- **Thingal Mandalam**(Chandra Mandalam) Lunar zone

  Lunar Region, located at the center of two eye brows.

13. MALAM – 3 (THREE IMPURITIES OF THE SOUL):

- **AANAVAM :**

  This act makes clarity of thought, knowing the power of the soul, yielding to the Egocentric consciousness like 'I' and 'Mine' considering everything is to his own.(Greediness)

- **KANMAM :**

  Goes in collusion with the other two and responsible for incurring paavam (the Sin) and Punniyam (virtuous deed/Sanctity)

- **MAYAI :**

  Climbing ownership of the property of someone else and inviting troubles.

14. THODAM – 3 (THREE HUMOURS):

- **VALI (VATHAM)**

  It is creative force, formed by Vaayu & Aakaya bootham.

- **AZHAL (PITHAM)**

  It is protective force, formed by Thee bootham

- **IYYAM (KABAM)**

  It is destructive force, formed by Mann & Neer bootham

15. EADANAI - 3 (PHYSICAL BINDINGS) :

Materialistic affinity Sibbling / Familial bonding

- **Porul patru -** Material Bindings
- **Puthalvar patru -** Offspring Bindings
- **Ulaga patru -** Worldly Bindings

16. GUNAM – 3 (THREE COSMIC QUALITIES) :

- **Sathuva Gunam (*Characters of Renunciation or Ascetic Virtues*) :**

  The grace, control of sense, wisdom, penance, generosity, excellence, silence and truthfulness are the qualities attributed to their benevolent trait.

- **Raso Gunam (*Characters of Ruler*) :**

  Enthusiasm, wisdom, valour, virtue/penance offering gift, art of learning and listening are the 8 traits.

- **Thamo Gunam (*Carnal and Immoral Characters*) :**

  Immortality, lust, killing laziness, violation of justice, gluttonousness, falsehood, forgetfulness and fraudulence etc.

17. VINAI – 2 (ACTS) :

- **Nalvinai -** Good Acts (Meritorious acts)
- **Theevinai -** Bad Acts (Sinful acts)

18. RAGAM – 8 (THE EIGHT PASSIONS) :

- **Kaamam** - Desire
- **Kurotham** - Hatred
- **Ulobam** - Stingy
- **Moham** - Lust (Intense or Sexual desire, infatuation)
- **Matham** - Pride (The feeling of respect towards one's self)
- **Marcharyam** - Internal conflict, Envy
- **Idumbai** - Mockery
- **Ahankaram** - Ego

19. AVATHAI – 5 (FIVE STATES OF CONSCIOUSNESS) :

- **NINAIVU-AWAKENED STATE *(Sakkiram)***

  This state exists between the eye-brows. The four strengths, the five senses, the five actions *(Asayam)* and the four *Andhakaranas* are active in this state.

- **KANAVU- Dream state *(Swappanam)***

  Dream state is one in which the five senses and five actions lie dormant at Adam's apple (Throat).

- **URAKKAM- Sleeping state *(Suzhuthi)***

  This is the state in which the Anthakaranas are associated with the soul but these could not be expressed to others and its seat being thorax.

- **PERURAKKAM- Deep sleep *(Turiyam)***

  The seevathma, along with wisdom lies at the navel region, here respiration takes place.

- **UYIRPADAKKAM- Immersed state of seevathma *(Turiyatheetham)***

  The seevathma deeply immersed in the moolathara without the awareness of impurity (malam), sloth (Mantham), delusion (maya) andother sense of touch.

THE UYIR THATHUKKAL :

The physiological units of the Human body are Vali (Vatham), Azhal (Pitham) and Iyyam (Kabam). They are also formed by the combination of the five elements.

Vatham = Vali+Aagayam : Creative force

Pitham = Thee : Force of preservation

Kabam = Mann+Neer : Destructive force

As per the above lines the Universe and the human body are made of five elements. If these three humours are in the ratio 1:½:¼ in equilibrium or in normal condition, then they are called as the Life forces.

SITES OF UYIR THATHUKKAL :

"பொங்கிய தைந்துக்குள் பொல்லாதது இம் மூன்றுதான்
தங்கிய வாயு சமத்தன் மகாவாதம்
பங்கிய வன்னியால் பகுந்தது பித்தமே
பகுந்த சலத்தில் பரிசிக்கும் நல்லையும்
வகுந்த இம்மூன்றால் வளர்ந்தது நோயெல்லாம்
அகுந்தது தானறிந்து அளவிட்ட யோகிகள்
மகிழ்ந்தே யிதில் நின்ற மயக்கம் அறிவாறே"

-பதிணென் சித்தர் நாடி சாஸ்திரம்

THE FORMATION OF UYIR THATHUKKAL

மூவகை நாடியும் உயிர் தாதுவும்

"தாது முறையே தனிஇடை வாதமாம்
போதுறு பின்கலை புகன்றது பித்தமாம்
மாது சுழுமுனை வழங்கிடும் ஐயமாம்
ஓது முறை பார்த்து உணர்ந்தவர் சித்தரே"

-பதிணென் சித்தர் நாடி சாஸ்திரம்

மூவகை வாயுவும் உயிர் தாதுவும்

"உணர்ந்த அபானன் உறும் அந்த வாதத்தில்
புணர்ந்த பிராணன் புகும் அந்தப் பித்தத்தில்
அணைந்த சமானன் அடங்கும் கபத்தோடு
இணைந்திவை மூன்றுக்கு எடுத்த குறி ஒன்றே"

-பதிணென் சித்தர் நாடி சாஸ்திரம்

Vali = Abanan + Idagalai

Azhal = Piranan + Pinkalai

Iyyam = Samanan + Suzhumunai

I.VALI (VATHAM) :

a) THE NATURE OF VALI :

Vali is soft, fine and the temperature (coolness and hotness) could be felt by touch.

b) SITES OF VALI :

"நெளிந்திட்ட வாதமபானத்தைப் பற்றி
நிறைந்திடையைச் சேர்ந்துந்திக் கீழே நின்று
குளிந்திட்ட மூலமதூ டெழுந்து காமக்
கொடியிடையைப் பற்றியெழுங் குணத்தைப் பாரே
நிணமான பொருத்திடமும் ரோமக் காலும்
நிறைவாகி மாங்கிசமெல் லாம்பரந்து"

- வைத்திய சதகம்

According to Vaithiya sathakam, vali dwells in the following places: They are Umbilicus, rectum, faecal matters, abdomen, anus, bones, hip joint, navel plexus, joints, hair follicle and muscles.

"அறிந்திடும் வாத மடங்கு மலத்தினில்"

- திருமூலர்

"நாமென்ற வாதத்துக் கிருப்பிடமே கேளாய்
நாபிக்குக் கீழென்று நவில லாகும்"

- யூகி முனிவர்

According to Sage Thirumoolar and Yugi muni, the places of Vatham are the anus and below the naval.

c) THE PROPERTIES OF VALI :

"ஒழுங்குடனே தாதேழ் மூச்சோங்கி இயங்க
எழுச்சிபெற எப்பணியுமாற்ற எழுந்திரிய
வேகம் புலன்களுக்கு மேவச் சுறுசுறுப்பு
வாகளிக்கும் மாந்தர்க்கு வாயு"

- சித்த மருத்துவாங்க சுருக்கம்

d) THE FUNCTIONS OF VALI :

1. To stimulate the respiration
2. To activate the body, mind and the intellect.
3. To expel the fourteen different types of natural reflexes.
4. To activate seven physical constituents in functional co- ordination.
5. To strengthen the five sense organs.

In the above process Vatham plays a vital role to assist the body functions.

II. AZHAL (PITHAM) :

a) THE NATURE OF AZHAL :

The nature of Azhal is atomic. It is sharp and hot. The ghee becomes watery, salt crystallizes and jaggery melts because of heat. The heat of Azhal is responsible for many actions and their reactions.

b) SITES OF AZHAL :

"தானான பித்தம் பின் கலையைப் பற்றிச்
சாய்வான பிராணவாயு வதனைச் சேர்ந்து
ஊனான நீர்ப்பையி லணுகி மூலத்
துதித்தெழுந்த வக்கினியை யுறவு செய்து
மானேகே ளிருதயத்தி லிருப்பு மாகி

கோனான சிரந்தனிலே யிறக்க மாகி

கொண்டுநின்ற பித்தநிலை கூறி னோமே”

-வைத்திய சதகம்

According to Vaithiya Sathagam, the pingalai, urinary bladder, stomach and heart are the places where Azhal sustains. In addition to the above places, the umbilicus, epigastric region, stomach, sweat, saliva, blood, essence of food, eyes and skin are also the places where Azhal sustains. Yugi muni says that the Azhal sustains in urine and the places below the neck.

c) THE CHARACTERS OF AZHAL :

Azhal is responsible for the digestion, vision, maintenance of the body temperature, hunger, thirst, taste etc. Its other functions include thought, knowledge, strength and softness.

d) THE FUNCTIONS OF AZHAL :

1. Maintenance of body temperature.
2. Produces reddish or yellowish colour of the body.
3. Produce heat energy on digestion of food.
4. Produces sweating.
5. Induces giddiness.
6. Produces blood and the excess blood are let out.
7. Gives yellowish coloration to the skin, eyes, faeces and urine
8. Produce anger, heat, burning sensation, inaction and determination.
9. Gives bitter or sour taste.

e) THE TYPES OF AZHAL:

1. **Aakkanal – Anal Pitham or Pasaka Pitham – The fire of digestion.**

   It lies between the stomach and the intestine and causes digestion and dries up the moist ingested substance.

2. **Vanna eri – Ranjaga Pitham – Blood promoting fire.**

   The fire lies in the stomach and imparts red colour to the chyme and produces blood. It improves blood.

3. **Aatralanki – Saathaga Pitham – The fire of energy.**

   It gives energy to do the work.

4. **Nokku Azhal – Alosaga Pitham – The fire of Vision.**

It lies in the eyes and causes the faculty of vision. It helps to visualize things.

5. **Ul oli thee – Prasaka Pitham – the fire of brightness.**

It gives colour, complexion and brightness to the skin.

III. IYYAM (KABAM) :

a) THE NATURE OF IYYAM :

Greasy, cool, dull, viscous, soft and compact are the nature of Iyyam.

b) THE SITES OF IYYAM :

“கூறினோஞ் சிலேத்மமது சமான வாய்வைக்
கொழுதியே சுழிமுனையைப் பற்றி விந்தில்
கீறியே சிரசிலாக் கினையைச் சேர்ந்து
சிங்குவையிண் ணாக்குநிண மச்சை ரத்தம்
மீறியே நிறங்கோண நரம் பெலும்பில்
மேவியதோர் மூலைபெருங் குடலிற் கண்ணில்
தேறியதோர் பொருத்திடங்க ளெல்லாஞ் சேர்ந்து
சிலேத்மமது வீற்றிருக்குந் திடங் கண்டாமே”

-வைத்திய சதகம்

Head, tongue, eyes, nose, throat, thorax, bone, bone marrow, joints, blood, fat, sperm and colon are the seats of Iyyam. It also lies in the stomach, spleen, the pancreas, chyle and lymph.

c) THE PROPERTIES OF IYYAM :

Stability, greasiness, formation of joints, the ability to withstand hunger, thirst, sorrow and distress are the qualities. It also helps to withstand sufferings.

d) **THE FUNCTIONS OF IYYAM :**

Greasiness, strength, roughness, knowledge, cool, growth, heaviness of bone, restriction of joint movements, pallor, indigestion, deep sleep and to have a sweet taste in tongue are the functions of Iyyam. The skin, eyes, faces and urine are white in colour due to the influence of Iyyam.

e) **THE TYPES OF IYYAM :**

- **Ali iyyam – Avalambagam:**
  Heart is the seat of Avalambagam. It controls all other types of Iyyam.
- **Neerpi iyyam – Kilethagam :**
  Its location is stomach. It adds moisture & gives softness to the ingested food.
- **Suvai kaan iyyam – Pothagam :**
  Its location is tongue. It is responsible for the sense of taste.
- **Niraivaiyyam – Tharpagam :**
  It gives coolness to the vision.
- **Ondri iyyam – Santhigam :**
  It gives lubrication to the bones particularly in the joints.

THE UDAL THATHUKKAL (PHYSICAL CONSTITUENTS) :

Udal Thathukkal is the basic physical constituents of the body. They are also constituted by the Five Elements.

1. **Saaram :** This gives mental and physical perseverance.
2. **Senneer:** Imparts colour to the body and nourishes the body.
3. **Oon :** It gives shape to the body according to the physical activity and cover the bone.
4. **Kozhuppu :** It lubricates the joints and other parts of the body to function smoothly.
5. **Enbu :** Supports the frame and responsible for the postures and movements of the body.
6. **Moolai :** It occupies the medulla of the bones and gives strength and softness to them.
7. **Sukkilam/Suronitham :** It is responsible for reproduction. These are the seven basic constituents that form the physical body. The bones are predominantly formed by the Earth component, but other elements are also present in it. All the three humours Vali, Azhal and Iyyam present in this 7constituents. The intake food converted to udal thaadhu in which the intake food is converted to saaram in the first day, and then it converted to chenneer in the Second-day, oon, kozhuppu, enbu, moolai and sukkilam/ Suronitham respectively in the following days. So in the seventh day only the intake food goes to the sukkilam/suronitham.

UDAL THEE (FOUR KINDS OF BODY FIRE) :

There are four kinds of body fire. They are Samaakkini, Vishamaakkini, Deekshaakkini and Manthaakkini.

- **SAMAAKKINI (BALACED DIGESTIVE FIRE) :**

  The digestive fire is called as Samaakkini. This is constituted by Samana Vayu, Anala Pitham and Kilethaga Kapham. If they are in normal proportion then it is called as Samakkini. It is responsible for the normal digestion of the food.

- **VISHAMAAKKINI (TOXIC DIGESTION) :**

  Due to deranged and displaced Samana Vayu, it takes a longer time for digestion of normal food. It is responsible for the indigestion due to slow digestion.

- **DEEKSHAAKINI (ACCENTUATED DIGESTION) :**

  The samana vayu rounds up the Azhal, which leads to increased Anala Pitham, so food is digested faster.

- **MANTHAAKKINI (SLUGGISH DIGESTION) :**

  The samana vayu rounds up the Iyyam, which leads to increased Kilethaga Kapham. Therefore food is poorly digested for a very longer period and leads to abdominal pain, distention heaviness of the body etc.

THINAI :

There are five thinai (The Land)

1. **Kurinji –** Mountain and its surrounding areas
2. **Mullai –** Forest and its surrounding areas
3. **Marutham -** Agricultural land and its surrounding areas
4. **Neithal -** The coastal and its surrounding areas
5. **Paalai –** Desert and its surrounding areas

FEATURES OF THE FIVE REGIONS :

1. KURINJI :

"குறிஞ்சி வருநிலத்திற்கு கொற்றமுண்டி ரத்தம்
உறிஞ்சி வருசுரமு முண்டாம் - அறிஞருரைக்
கையமே தங்குதரா தாமைவல்லை யுங்கதிக்கும்
ஐயமே தங்கும் அறி"

- பதார்த்த குண சிந்தாமணி

Fever causing anemia, any abnormal enlargement in the abdominal organ (vaitrulaamai katti) also leads to Iyya disease.

2. MULLAI :

"முல்லை நிலத்தயமே மூரிநிரை மேவினுமவ்
வெல்லை நிலைத்தபித்த மெய்துருங்காண் - வல்லையெனின்
வாதமொழி யாததனுள் மன்னு மவைவழிநோய்ப்
பேதமொழி யாதறையப் பின்பு"

- பதார்த்த குண சிந்தாமணி

This mullai land leads to Azhal, Vallai & Vali diseases.

3. MARUTHAM :

"மருதநிலம் நன்னீர் வளமொன்றைக் கொண்டே
பொருதனில மாதியநோய் போக்கும் - கருதநிலத்
தாறிரதஞ்சூழ அருந்துவரென் றாற்பிணியெல்
லேறிரதஞ் சூழ்புவிக்கு மில்"

- பதார்த்த குண சிந்தாமணி

All the Vali, Azhal and Iyyam disease will be cured in this land.

4. NEITHAL :

"நெய்தனில மேலுப்பை நீங்கா துறினுமது
வெய்தனில மேதங்கு வீடாகும் - நெய்தல்
மருங்குடலை மிக்காக்கும் வல்லுறுப்பை வீக்கும்
கருங்குடலைக் கீழிறக்குங் காண்"

- பதார்த்த குண சிந்தாமணி

This place induces Vali diseases and affects liver and intestines.

5. PAALAI :

"பாலை நிலம்போற் படரைப் பிறப்பிக்க
மேலைநில மியாது விரித்தற்கு - வேலை நில
முப்பிணிக்கும் மில்லம் முறையே யவற்றகலாம்
எப்பிணிக்கு மில்லமஃ தெண்"

- பதார்த்த குண சிந்தாமணி

This land produces all the three Vali, Azhal and Iyyam disease.

KAALAM :

Ancient Tamilians had divisions over the year into different seasons know as Perumpozhudhu and likewise in the day, it is known as Sirupozhudhu.

a. PERUMPOZHUTHU :

The year is divided into six seasons. They are,

1. Kaarkalam – Aavani, Purataasi (August 16-October 15)
2. Koothir – Aipasi, Kaarthigai (October 16-December 15)
3. Munpani – Maargazhi, Thai (December 16-February 15)
4. Pin pani – Maasi, Panguni (February 16-April 15)
5. Ilavenil – Chithirai, Vaigaasi (April 16-June 15)
6. Mudhuvenil – Aani, Aadi (June 16 – August 15)

b. SIRUPOZHUDHU :

The day has been divided into six parts of four hours each. They are maalai (evening), yammam (Midnight), Vaigarai (Dawn), Kaalai (Morning), Nannpakal (Noon), Erpaddu (Afternoon). The each perum pozhuthu and sirupozhuthu is associated with the three humours naturaly.

NILAM	**POZHUTHU**	
	PERUMPOZHUTHU	**SIRUPOZHUTHU**
Kurinji	Koothir kaalam, Munpani	Naduiravu
Mullai	Kaarkaalam	Maalai
Marutham	Ilavenil, Venil, kaarkaalam, koothirkaalam, Munpani, Pinpani	Vaigarai, kaalai
Neithal	Ilavenil, Venil, kaarkaalam, koothirkaalam, Munpani, Pinpani	Pirpagal
Paalai	Venil, Pinpani	Nadupagal

Table.1 Pozhuthugal

FOURTEEN NATURAL REFLEXES / URGES :

The natural reflexes excretory, protective and preventive mechanisms are responsible for the urges and instincts. They are 14 in number

1. Vatham (Flatus)
2. Thummal (Sneezing)
3. Siruneer (Micturition)
4. Malam (Defecation)
5. Kottavi (Act of yawning)
6. Pasi (Sensation of hunger)
7. Neer vetkai (Sensation of thirst)
8. Erumal (Coughing)
9. Elaipu (Fatigue)
10. Thookam (Sleep)
11. Vaanthi (Vomiting)
12. Kanneer (Tears)
13. Sukkilam (Semen)
14. Suvasam (Breathing)

These natural reflexes are said to be an indication of normal functioning of our body. A proper maintenance should be carried out and they should not be restrained with force.

3.B. SIDDHA PATHOLOGY

KUGARANA NILAI IN SIDDHA MEDICINE

This is the first medical system to emphasis health as the perfect state of physical, psychological, social and spiritual component of human being. The condition of the human body in which the dietary habits, daily activities and the environmental factors influence to keep the three humours in equilibrium is considered as healthy living.

DISEASE

Disease is also known by other names viz sickness, distemper, suffering and ailment, distress of mind, chronic disease and dreadful illness.

1. **THE CHARACTERISTIC FEATURES OF THE DISEASE**

Diseases are of two kinds

i. Pertaining to the body

ii. Pertaining to the mind according to the variation of the three humours .

CAUSES OF DISEASE

Excepting the disease caused by our previous births, the disease is normally caused by our food habits and actions.

This has been rightly quoted in the following verses by Sage Thiruvalluvar,

"மிகினும் குறையினும் நோய்செய்யும் நூலோர்
வளிமுதலா எண்ணிய மூன்று"

-திருவள்ளுவர்

The food and actions of a person should be in harmony with the nature of his body. Any increase or decrease in a humour viz. Vatham, Pitham, Kabam leads to the derangement of the three humours . The acceptance of food means the taste and quality of the food eaten and a person's ability to digest. 'Actions' mean his good words, deeds or bad actions. According to Sage Thiruvalluvar, the disease is caused due to the increase or decrease of three humours causing the upset of equilibrium. So disease is a condition in which there is derangement in the five elements, which alters the three humours , reflected in turn in the seven physical constituents. The change could be an increase or decrease in the humours. This shows the following signs as per vitiation of the individual humour.

2. QUANTITATIVE CHANGES OF UYIR THATHUKKAL

HUMOUR	INCREASED	DECREASED
VALI (Vatham)	Wasting, blackish discoloration, affinity to hot foods, tremors, distended abdomen, constipation, weakness, insomnia, weakness in sense organs, giddiness and laziness.	Body pain, feeble voice, and diminished capability of the brain, decreased intellectual quotient, syncope and increased kaba condition.
AZHAL (Pitham)	Yellowish discoloration of conjunctiva, skin, urine and feces, polyphagia, polydypsia, dyspepsia, burning sensation all over the body and decreased sleep.	Loss of appetite, cold, pallor and features of increased kabam.

IYYAM (Kabam)	Loss of appetite, excessive salivation, diminished activity, heaviness, pallor, cold, decreased physical constituents, dyspnoea, flatulence, cough and excessive sleep	Giddiness, dryness of the joints and prominence of bones. Profuse sweating in the hair follicles and palpitation.

Table.2 Changes of Uyir Thathukkal

3.UDAL THATHUKKAL

UDAL THATHUKKAL	**INCREASED FEATURES**	**DECREASED FEATURES**
SAARAM	Loss of appetite, excessive salivation, diminished activity, heaviness, pallor, cold, decreased physical constituents, dyspnoea, flatulence, cough and excessive Sleep	Dryness of skin, tiredness, loss of weight, lassitude and Irritability while hearing louder sounds.
SENNEER	Boils in different parts of the body, splenomegaly, tumours, pricking pain, loss of appetite, haematuria, hypertension, reddish eye and skin, leprosy and jaundice.	Affinity to sour and cold food, nervous, debility, drynezs and Pallor.
OON	Tubercular adenitis, venereal diseases, extra growth around neck, cheeks, abdomen, thigh and genitalia.	Lethargic sense organs, pain in joints, muscle wasting in mandibular region, gluteal region, penis and thighs.
KOZHUPPU	Identical feature of increased flesh, tiredness, dyspnoea on exertion, extra musculature in gluteal region, external genitalia, chest, abdomen and thighs.	Loins pain, splenomegaly and emaciation.
ENBU	Excessive ossification and dentition	Joint pain, falling of teeth, falling and splitting of hairs and nails.

MOOLAI	Heaviness of the body and eyes, Swollen Inter phalangeal joints, oliguria and non-healing ulcers	Osteoporosis and Blurred vision.
SUKKILAM (OR) SURONITHAM	Increased sexual activity, urinary calculi	Dribbling of sukkilam / suronitham or senner during coitus, pricking pain in the testis and inflamed & contused external genitalia.

Table.3 Changes of Udal Thathukkal

4. SUVAIGAL

TASTES	DISEASES DUE TO HIGH INTAKE
Inippu	Develops obesity, excessive fat, increased mucous secretion, indigestion, diabetes, cervical adenitis, increased kabam and its diseases
Pulippu	Develops nervous weakness, dull vision, giddiness, aneamia, dropsy, dryness of tongue, acne, blisters etc.
Uppu	Ageing, hair loss, leprosy, dryness of tongue, debility
Kaippu	Increased dryness of tongue, defected Spermatogenesis, body weakness, dyspnoea lassitude, tremor, back and hip pain
Kaarppu	Dryness of tongue, generalized malaise, tremor, back pain, lassitude etc.
Thuvarppu	Abdominal discomfort, chest pain, tiredness, impotency, vascular constriction, constipation, dryness of tongue etc.

Table 4. Suvaigal

5. KAALAM

KAALAM (Season)	KUTTRAM	STATE OF KUTTRAM
1. Kaar kaalam **(Rainy)**Aavani -Puratasi(Aug 16 – Oct 15)	Vatham ↑↑ Pitham ↑ Kabam (--)	Ectopic escalation In situ escalation Restitution
2. Koothir Kaalam **(Post rainy)**Iypasi –Karthigai (Oct 16 – Dec 15)	Vatham (--) Pitham ↑ ↑ Kabam (--)	Restitution Ectopic escalation Restitution
3. Munpani Kaalam **(Winter)** Markazhi – Thai (Dec 16 – Feb 15	Vatham (--) Pitham (--) Kabam ↑	Restitution Restitution Restitution
4. Pinpani Kaalam **(Post winter)** Masi – Panguni (Feb 16 –Apr 15)	Vatham (--) Pitham (--) Kabam ↑ ↑	Restitution Restitution In situ escalation
5. Elavenil Kaalam **(Summer)** Chithirai – Vaikasi(Apr 16 – Jun 15)	Vatham (--) Pitham (--) Kabam ↑ ↑	Restitution Restitution Ectopic escalation
6. Mudhuvenil Kaalam **(Post summer)** Aani – Aadi (Jun 16 – Aug 15)	Vatham ↑ Kabam (--)	In situ escalation Restitution

Table 5.changes in Climatic condition of the external world and its corresponding changes in the human organ

6. THINAI

THINAI	LAND	HUMOURS
1. Kurinchi	Mountain and its surroundings - Hilly terrain	Kabam
2. Mullai	Forest and its surroundings - Forest ranges	Pitham
3. Marutham	Farm land and its surroundings – Cultivable lands	All three humours are in Equilibrium
4. Neithal	Sea shore and its adjoining areas, Coastal belt	Vadham
5. Paalai	Desert and its surroundings Arid zone	All three humours are Affected

Table 6. Thinai, Land, Humours

ALTERATION IN REFLEXES (14 Vegangal)

There are 14 natural reflexes involved in the physiology of normal human being. If will fully restrained or suppressed, the following are resulted.

- **Vatham (Flatus)**

  This urge should not be suppressed. If it is suppressed it leads to chest pain, epigastric pain. Abdominal pain, ache, constipation, dysuria and indigestion predominate.

- **Thummal (Sneezing)**

  If restrained, it leads to headache, facial pain, low back pain and neurotic pain in the sense organs.

- **Siruneer (Urine)**

  If restrained, it leads to urinary retention, urethral ulcer, joint pain, pain in the penis, gas formation in abdomen.

- **Malam (Feces)**

  If restrained, it leads to pain in the knee joints, headache, general weakness, flatulence and other diseases may also originate.

- **Kottavi (Yawning)**

  If restrained, it leads to indigestion, leucorrhoea, and abdominal disorders.

- **Pasi (Hunger)**

  If restrained, it leads to the tiredness of all organs, emaciation, syncope, apatheticface and joint pain.

- **Neervetkai (Thirst)**

  If restrained, it leads to the affection of all organs and pain may supervene.

- **Kaasam (Cough)**

  If it is restrained, severe cough, bad breath and heart diseases will be resulted.

- **Ilaippu (Exhaustiveness)**

  If restrained, it will lead to fainting, urinary disorders and rigor.

- **Nithirai (Sleep)**

  All organs will get rest only during sleep. So it should not be avoided. Disturbance will lead to headache, pain in the eyes, deafness and slurred speech.

- **Vaanthi (Vomiting)**

  If restrained, it leads to itching , anaemia, eye diseases and symptoms of increased Pitham.

- **Kanneer (Tears)**

  If it is restrained, it will lead to Sinusitis, heart diseases, headache, eye diseases.

- **Sukkilam (Semen)**

  If it is restrained, there will be joint pain, difficulty in urination, fever and chest pain.

- **Suvasam (Breathing)**

  If it is restrained, there will be cough, abdominal discomfort and Anorexia.

3.C. DIAGNOSTIC METHODOLOGY

The methodology of diagnosing disease in Siddha system shows uniqueness in its principle. The principle comprises of examination of Tongue, Complexion, Modulation in speech, inspection of eyes and findings by palpation. It also includes examination of urine and stool. The reinforcement of Diagnosis is based on Naadi (Pulse) examination. All these together constitute 'Envagai thervugal' which forms the basis of diagnostic methodology in Siddha system of Medicine.

These tools not only help in diagnosis but also to observe the prognosis of the disease and for reassuring the patient and to be informed about the nature of diseases. Besides these Envagai thervugal there are some other parameters in Siddha system which are greatly helpful in diagnosing various disease, they are Madikkadai nool (Wrist circummetric sign) and Soditham (Astrology).

ENVAGAI THERVUGAL (Eight fold examination)

The eight such diagnostic methods, collectively refered to as "Envagai thervu (Eight type) Thervugal (Examination)" in Siddha system.

"அகத்துறு நோயை கரத்தாம லகம்போல்
பகுத்தறிவீர் நாடிப் பரிசம் - தொகுத்த நிறம்
கட்டுவகைச் சொல்மொழிக் கண்ட மல மூத்திரம் நா
எட்டுவகை யாலு மறிவீர்"

-அகத்தியர் வைத்திய சிந்தாமணி - 4000

Various aspects of Siddha regarding 'Envagai Thervu'

"நாடி பரிசம் நாநிறம் மொழிவிழி
மலம் மூத்திரமிவை மருத்துவராயுதம்"

-தேரையர்.

"மெய்குறி நிறந்தொனி விழிநா விருமலம் கைக்குறி"

-தேரையர்

The eight methods of diagnosis are Naadi (Pulse), Sparisam (Palpation), Naa (Tongue), Niram (Color), Mozhi (Voice), Vizhi (Eyes), Malam (Feces) and Neer (Urine).

1. NAADI (Examination of pulse)

The pulse Diagnosis is a unique method in Siddha Medicine. The pulse should be examined in the right hand for male and the left hand for female. The pulse can be recorded at the radial artery. By keenly observing the pulsation, the diagnosis of disease as well as its prognosis can be assessed clearly.

Naadi is nothing but the manifestation of the vital energy that sustains the life with in our body. Naadi plays an important role in Envagai thervu and it has to be considered as foremost thing in assessing the prognosis and diagnosis of various diseases. Any variation that occurs in the three humours is reflected in the Naadi. These three humours organize, regularize and integrate basic functions of the human body. So, Naadi serves as good indicator of all ailments.

நாடி பார்க்கும் வகை

"இடுமென்ற நாடிகள் பார்க்கும் வகையைக்கேளு
என்னவென்றால் நடுவிரல் நீவிப்பின்னே
அடுமென்ற அடுத்தவிரல் மோதிரமாம் விரலை
அப்பனே இளுத்தபின்பு சுண்டுவிரலிளுத்து
உடுமென்ற தூண்டுவிரலி ளுத்து அப்பால்
உத்ததொரு அங்குட்ட விரலைநீ விக்கரத்தில்
படுமென்ற சீயோதி அங்குல மோதள்ளி
பார்தவிட மூன்றுதாம் சுரம்பார்க்கும் வகையே
வகைஎன்ன வாதமதுஒண்ணரையாம் பித்தம்
வளமையொன்று அய்யங்கால் வளமாய்நிற்கில்
பகையில்லை நாடிகளுந் தொந்த மில்லை
பண்பான் சுகரொசருரூபக் கூறுசொன்னேன்"

-அகத்தியர் கனகமணி 100

Naadi is felt by

Vali - Tip of index finger

Azhal - Tip of middle finger

Iyyam - Tip of ring finger

மூவகையும் மாத்திரை அளவும்:

"வழங்கிய வாதம்மாத்திரை ஒன்றாகில்
வழங்கிய பித்தம் தன்னில் அரைவாசி
அழங்கும் கபந்தான்அடங் கியேகாலோடில்
பிழங்கிய சீவர்க்குப் பிசகொன்று மில்லையே"

- குணவாகட நாடி

The pulse is measured in wheat/grain expansile heights. The normal unit of pulse diagnosis is 1 for Vali (Vaadham), ½ for Azhal (Pitham) and ¼ for Iyyam (Kabam).

நாடி நடை

"வாகிலன்னங் கோழி மயிலென நடக்கும் வாதம்
ஏகிய வாமையட்டை யிவையென நடக்கும் பித்தம்
போகிய தவளை பாம்பு போலவாம் சேத்துமந்தான்"

- குரு நாடி

Compared to the gait of various animals, reptiles and birds.

Vali - Movement of Swan and peacock

Azhal - Movement of Tortoise and Leech

Iyyam - Movement of Frog and Serpent

2. SPARISAM (Examination by touch)

TOUCH (தொடு உணர்வு):

"வெம்மை குறைந்தாலு மிகுந்தாலும் வாதபித்தம்
தம்மை நிரைநிரையாய்ச் சாற்றுவார்-வெம்மையன்றி
சீதமுஅவ் வாறாகில் சிலேட்டும மொன்றுதொந்த
மீதமும்அவ் வாறாகு மேல்"

-அகத்தியர் வைத்திய சிந்தாமணி - 4000

"நேயமுடனே வாதத்தின் தேசந்தாணும்
நேர்மையாய் குளிர்ந்து சில விடத்திலே தான்
மாயமுட னுட்டணமுந் துடிதுடிப்பு
மருவுதலாம் பித்தத்தின் தெகந் தானும்
தோயவே வுட்ணமதா யிருக்குந் தெளிவாய்
சேத்துமத்தின் தேகமது குளிர்ந்திருக்கும்

பாய தொந்த தேகமது பலவாறாகும்

பரிந்து தொட்டுத் தேகத்தைப் பார்த்துப் பேசே"

-கண்ணுசாமி பரம்பரை வைத்தியம்

In Vali disease, some regions of the body felt chill and in some areas they are hot.

In Azhal disease, we can feel heat.

In Iyya disease, chillness can be felt.

In Thontham diseases, we can feel altered sensations.

3. NAA (Examination of tongue)

"பலமான ருசியறியும் நாவின் கூற்றை

பகர்கின்றேன் வாதரோகி யின்றன் நாவு

கலமாக வெடித்து கறுத்திருக்கு முட்போல்

கண்டு கொள்வாய் பித்தரோகியின்றன் நாவு

நலமுற சிவந்து பச்சென்றிருக்கும் நட்பிலா

சிலேத்துமரோகி யின்றன் நாவு

தலமதனிலுற்றமுதி யோர்கள் சொன்ன

தன்மையடி தடித்து வெளுத்திருக்கும் பாரே"

-கண்ணுசாமி பரம்பரை வைத்தியம்

In Vali derangement, tongue will be cold, rough, furrowed and tastes pungent.

In Azhal, it will be red or yellow and bitter taste will be senced.

In Iyyam, it is pale, sticky and sweet taste will be lingering.

In Thontham, tongue will be dark with raised papillae and dryness.

4. NIRAM (Examination of complexion)

"தேகத்தி னிறந்தானுஞ் செப்பக் கேளீர்

சிறுமையாய் வாதந்தான் கறுத்தி ருக்கும்

போகத்தின் பித்தநிற மஞ்ச ளாகும்

பெருஞ்சேத்ம ரோகிக்கு வெளுப்ப தாகும்

பாகத்தின் தொந்தரோ கிக்குத் தானும்

பலபலவன் ணமுமாகிப் பரந்து நிற்கும்"

-சித்த மருத்துவாங்கச் சுருக்கம்

In Vali, Azhal and Iyyam variations, the colour of the body will be dark, yellow or red and fair respectively.

"உரைத்தகற் பான்வாத ரோகிபித்த ரோகி
அரைத்தமஞ்ச ளைக்குளித்தோன் ஆவான் - இரத்தம்
குளித்தவனு மாவான் கொடும்சிலேத்தும ரோகி
வெளுத்திடுவான் தொந்த ரோகியே"

- அகத்தியர் வைத்திய சிந்தாமணி - 4000

According to Agathiyar Vaithiya Chinthamani – 4000, In Vatha, Pitha and Kaba vitiations the colors of body like as yellow, red and pale.

"மூன்றாகும் வாதபித்த சிலேத்து மத்தால்
மிகுந்தமுறத் தொந்தித்த ரோகி தேகம்
தோன்றாத சீதய வுஷ்ணங் காலமூன்றுந்
தொகுத்தேன்யான் திரேகத்தி நிறத்தைக் கேளு
ஊன்றாத வாதவுடல் கறுத்துக் காணும்
ஊறியபித்த முடல் சிவப்புப் பசுமைகாணும்
போன்றாத வையவுடல் வெண்மை தோன்றும்
பொருந்துந்தொந்த ரோகவுடற் கிவற்றை யொக்கும்"

- கண்ணுசாமி பரம்பரை வைத்தியம்

According to Kannusamy Paramparai Vaithiyam, In Vatha, Pitha and Kaba vitiations, the colors of the body like as black, reddish green and white. In Thontha constitution, the color of the body will be associated with combination of two humours.

"பனைவாத தேகநிறங் கறுத்து நிற்கும்
பைத்தியதேக நிறமஞ்சள் சிவப்பதாமே
தாமே சிலேட்டு மதேகநிறம் வெளுப்பு தான்
தொந்தேகம் இந்நால் விதமாய நிற்கும்"

- தன்வந்திரி (பதிணெண் சித்தர் நாடி சாத்திரம்)

According to Pathinen Siddhar Naadi Nool, In Vatha, Pitha and Kaba vitiations, the colors of the body like as black, yellowish red and white. In Thontha constitution, the color of the body will be associated with combination of two humours.

5. VIZHI (Examination of Eyes)

"உண்மையாய் கண்கள்குறிப் பதைக்கேள் வாதம்
உற்றவிழி கறுத்துநொந்து நீருங் காணும்
தண்மையிலாப் பித்தரோகி யின்றன் கண்கள்
சார்பாகப் பசுமைசிவப் பேறுங் காணும்
வண்மையிலா வையரோகி விழிகள் தானும்
வளமான வெண்மைநிற மேதா நாதம்
திண்மையிலாத் தொந்தரோகி யின்றன் கண்கள்
தீட்டுவாய் பலநிறமென் றறைய லாமே"

-கண்ணுசாமி பரம்பரை வைத்தியம்

"காணுகின்ற வாத ரோகிக்கு கண்கள்
கருநிறமாய் நொந்துமிகத் தண்ணீர்பாயும்
பூணுகின்ற பித்தரோகிகடி மஞ்சள் போலிருக்கம்
சிவப்பு நிறப்பொலிவு தோன்றும்"

-பதினெண் சித்தர் நாடி சாத்திரம்

In Vali disease the tears are darkened.

In Azhal disease tears are yellow.

In Iyya disease tears are whitish in colour

In Thontha disease the tears are multi coloured.

In Vali disease there will be excessive tears (epiphora).

In disturbance of all three humours , eyes will be inflamed and reddish.

6. MOZHI (Examination of voice)

"பார்பதான் வாதரோகி யின்றன் வார்த்தை
பக்குவமாய்ச் சமசத்த மாயிருக்கும்
சேர்ப்பதுதான் பித்தரோகியின்றன் வார்த்தை
செப்பக்கோள பெலத்துமே யுறத்திருக்கும்
ஏற்பதுதான் ஐயரோகி யின்றன் வார்த்தை
யெளிதாகச் சிறுத்திருக்குமியல்பி தாகும்
கேசற்கவே யிம்மூன்றுந் தொந்தமாகில்
கூசாமற் பலவிதமாய் பேசுவாரே"

-கண்ணுசாமி பரம்பரை வைத்தியம்

In variation of Vali, Azhal and Iyyam the voice will be medium, high and shrill/low pitched respectively. By the voice, the strength of the body can be assessed.

7. MALAM (Examination of feces)

"ஒக்குமே வாத நோய் மலத்தைப் பார்க்கில்
உகந்தமலம் கறுகியெ கறுத்திருக்கும்
மிக்கபித்த நோய்மலத்தை யுற்றுப் பார்க்கில்
மிகுந்தசிவப்புடன் பசுமை தானுந் தோற்றும்
மைக்குவளை மானேகே ளைய ரோகம்
மலமதுதான் வெண்மைனிற மாயிருக்கும்
பக்குவமா யிம்மூன்றுந் தொந்திப் பாகில்
பகருமின் நிறங்கள்வகை பரிந்து காணும்"

-கண்ணுசாமி பரம்பரை வைத்தியம்

In excacerbatedVali, faces is hard, dry and black in colour.

In Azhal vitiation, it is yellow.

In Iyyam disturbances it is pale

In Thondham, it is mixture of all colours.

8. MOOTHIRAM (Examination of urine)

“ஓங்கிய வாதத்தோர்க்கு நீர்விழுங் குணந்தா நுரைக்கின்ற
பூங்கொடி கடுத்து நொந்து சிறுத்துடன் பொருமி விழும்
பாங்குடன் பித்ததோர்க்கும் பசிய நீர் சிவந்து காட்டி
ஏங்கவே கறுக்கதாக எரித்துடன் கடுத்து வீழும்
வீழுமே சிலேற்பனத்தோர் நீர்க்குணம் விளம்பக் கேளாய்
நாளுமே வெளுத்துறைந்து நலம்பெறவீழுங் கண்டாய்
வாள்விழி மானேதொந்த ரோகமானிடர்க்குந் தானே
தாளுநீர் பலநிறந்தா னெனவேசாற்றி னோமே”

-கண்ணுசாமி பரம்பரை வைத்தியம்

For patients suffering from Vatha diseases, the urine will be scanty and dysuria. For patiets suffering from Pitham the urine will be greenish red in colour and there will be burning micturition.

தேரையர் நீர்க்குறி நெய்க்குறி

"அருந்துமாறிரதமும் அவிரோதமதாய்
அஃகல் அலர்தல் அகாலவூன் தவிர்ந்தழற்
குற்றளவருந்தி உறங்கி வைகறை
ஆடிக்கலசத் தாவியே காது பெய்
தொருமுகூர்த்தக் கலைக்குட்படு நீரின்
நிறக்குறி நெய்க்குறி நிறுமித்தல் கடனே"

-தேரையர் நீர்க்குறி நெய்க்குறி

Theraiyar, one of the renowned authors of Siddha medicine described urine examination and stages of health. He had explained about the colour and consistency of the urine in vitiated humour and disease (Neerkuri). He also emphasized the spreading nature of a single drop of oil on the surface of the urine indicating the imbalance of specific dosha and prognosis of disease (Neikkuri).

Neerkuri:

“வந்த நீர்க்கரி எடை மணம் நுரை எஞ்சலென்
றைந்தியலுளவவை யறைகுது முறையே"

-தேரையர் நீர்க்குறி நெய்க்குறி

Five characters of urine has to be examined. Those are colour, consistency, odour, frothy and deposits.

Colour of the urine

Normal urine is straw yellow coloured with mildly aromatic. The time of the day and food taken will have an impact on the colour of the urine.

Colour of the urine in diseased condition

Yellow colour (Similar to straw soaked water) - Indigestion

Lemon colour - Good digestion

Reddish yellow - Heat in body

Colour similar to flame of forest red or flame coloured - Excessive heat

Colour of saffron - Extreme heat

Neikkuri:

"அரவென நீண்டினஃதே வாதம்
ஆழிபோல் பரவின் அஃதே பித்தம்
முத்தொத்து நிற்கின் மொழிவதன் கபமே"

-தேரையர் நீர்க்குறி நெய்க்குறி

The spreading pattern of oil drop is the indicative of Vali, Azhal and Iyyam diseases.

Aravu (Snake Pattern of spread) indicates Vali disease.

Aazhi (Ring Pattern of spread) indicates Azhal disease.

Muthu (Pearl Pattern of spread) indicates Iyya disease.

In Neikkuri, the rapid spread of oil drop; Pearl beaded and Sieve type of spreading pattern indicates incurable state of the disease. From this, we can assess the prognosis by the Neikkuri.

Indications of spreading pattern of oil

Lengthening	-	Vali
Splits	-	Azhal
Sieve	-	Iyyam
Stands as a drop	-	Poor prognosis
Slowly spreads	-	Good prognosis
Drop immerses into Urine	-	Incurable disease

MANIKKADAI NOOL (Wrist circumetric sign)

Ref:Agathiyar Soodamani Kayaru Soothiram

"கமலக்கை மணிக்கையில் கயறு சூத்திரம்
விமலனே நோக்கியே வேடமாமுனி
திமிலாம் பிணியது சேரச் செப்பியே
அமலனாமுனிக்கு முன்னருளிச் செய்ததே"

-பதினெண் சித்தர் நாடிநூல்

According to the Pathinen Siddhar Naadinool, Manikjadai Nool is also helpful in diagnosis. This Manikkadai Nool is a parameter to access the disease by measuring the circumference of the wrist by means of a thread and then expressing it in terms of patient's finger breadths. By this measurement the disease can be diagnosed.

Manikkadai Nool Inference

(Ref: Agathiyar Soodamani Kayaru Soothiram)

When the Manikkadai Nool is 11 fbs, the person will be stout and he will live a healthy life for many years. When the Manikkadai Nool measures between 4 & 6, it indicates poor prognosis of disease and the severity of the illness will be high and it leads to death.

Measurement Possible conditions

- 10 fbs Pricking pain in chest and limbs, gastritis and ulcer result.
- 9 ¾ fbs Fissure, dryness and cough will be resulted.
- 9 ½ fbs Odema, increased body heat, burning sensation of eye, fever, Mega noi& Anorexia.
- 9 ¼ fbs Dysuria, Insomnia, Sinusitis and Burning sensation of Eye.
- 9 fbs Impaired hearing, pain around waist, thigh pain, unable to walk.
- 8 ¾ fbs Increased body heat, skin disease due to toxins, abdominal discomfort, cataract, sinusitis.
- 8 ½ fbs Leucorrhoea, venereal disorder and Infertility will occur.
- 8 ¼ fbs Stout and painful body. Headache, Sinusitis and toxins induced Cough.
- 8 fbs Abdominal discomfort, gastritis, anorexia & venereal diseases.
- 7 ¾ fbs Piles, burning sensation of limbs, headache, numbness occur.
- Within 2 years cervical adenitis and epistaxis results.
- 7 ½ fbs Osteoporosis, abdominal discomfort, burning sensation of eyes, increased body temperature. Within 6 days all the joints of the limbs presents a swelling.
- 7 ¼ fbs Lumbar pain, increased pitha in head, anemia, eye pain, odema and somnolence
- 7 fbs Pitham ascends to head, haemetemesis, phlegm, burning sensation of limbs and constipation.
- 6 ¾ fbs Eye ache, dizziness, testis disorder. Within 3 years it causes anuria, pain and burning sensation over limbs, facial sweating results.
- 6 ½ fbs Thirst, anorexia, increased body heat and Vatham results.
- 6 ¼ fbs Diarrhea, belching, vomiting and mucous dysentery
- 6 fbs Reduced weight, phlegm in chest. It results in death within 20days.

- 5 ¾ fbs Delirium, dizziness, loss of consciousness. It results in death even if the patient takes gruel diet
- 5 ½ fbs Severity of illness is increased. Toxins spread to the head.Tooth darkens. Patient will die in 10 days.
- 5 ¼ fbs Patient seems to be sleepy and death results on the next day.
- 5 fbs Pallor and dryness of the body. Kabam engorges the throat and the person will die.
- 4 ¾ fbs Dryness of tongue and tremor present. Patient will die in 7days.
- 4 ½ fbs Shrunken eyes, odema will present and death results in 9 days.
- 4 ¼ fbs Tremor, weakness of limbs and darkening of face occurs.
- 4 fbs Pedal oedema will be present. Patient will die in 5 days.

4. READING BETWEEN THE LINES OF SAGE YUGI ABOUT VANNI PITHAM

வன்னி பித்தம்

கொள்கையாய்ப் பேதமாய் வயிறுளைந்து
கொடிதான கனல் தானுங் கபாலமேறி
வள்கையாய்ச் சீதமாய்ச் செந்நீர் பாய்ந்து
வாட்டமாய் கருகியே உடல் வெளுத்து
மள்கையாய் மயக்கமொடு தியக்கமாகி
வாறான வசனமிகத் தானுஞ் செல்லா
நள்கையாய் நாவழன்று புளிப்பு காணும்
நளினமாம் வன்னி பித்த நாட்டலாமே

-யூகி வைத்திய சிந்தாமணி பெருநூல்-800

(பக்கம் எண்-248)

According to text Yugi Vaithiya Chinthamani - 800, Vanni Pitham is a type of Pitha disease characterized by abdominal pain, fever, bloody diarrhoea with mucus, paleness (anaemia), dizziness or weakness, anorexia, glossitis with sour taste of the tongue.

4.1 BREAKUP SYYMPTOMATOLOGY

S.NO	LINES FROM POEM	BREAKUP SYYMPTOMATOLOGY
1.	“கொள்கையாய்ப் பேதமாய் வயிறுளைந்து”	Boring pain in Abdomen or diarrhoea
2.	“கொடிதான கனல் தானுங் கபாலமேறி”	High Fever
3.	“வள்கையாய்ச் சீதமாய்ச் செந்நீர் பாய்ந்து”	Bloody diarrhoea with mucus
4.	“வாட்டமாய் கருகியே உடல் வெளுத்து”	Paleness (anaemia)
5.	“மள்கையாய் மயக்கமொடு தியக்கமாகி”	Dizziness or weakness
6.	“வாறான வசனமிகத் தானுஞ் செல்லா”	Anorexia
7.	“நள்கையாய் நாவழன்று புளிப்பு காணும்”	Glossitis with sour taste of tongue

Table.7 Breakup Symptomatology

4.2 LIGHT FROM LEXICONS

S. NO	WORDS FROM POEM	T.V. Sambasivampillai Dictionary Meaning in Tamil	T.V.Sambasivam Pillai, Dictionary meaning in English	Tamil mozhiagarathi Lexicon T.V.S. Reference
1.	வன்னி	தீ	Fire	(5th vol pg no: 1226)
2.	பேதம்	பேதகம்	Difference	(5thvol pg no:587)
3.	வயிற்று ளைவு	வயிற்றில் குடைதல் போன்ற நோய், வயிற்றுப் போக்கு (செரியாமல் மலங்கழிகை)	Boring pain in abdomen, Diarrhoea	(5thvol pg no:1003) (6thvol pg no – 3501)
4.	கொடிது	கொடியது	That which is virulent or violent as cholera	(2nd vol pg no:530)
5.	கனல்	நெருப்பு, உஷ்ணம்	Fire Heat	(2ndvol pg no – 1290)
6.	கபாலம்	தலை	The head in general	(2ndvol pg no-1101)
7.	ஏறுதல்	உயருதல், மேற்போதல், அதிகப்படல்	Rising high Going up To increase	(1stvol pg no – 942)
8.	சீதம்	குளிர்ச்சி, நீர்	Chillness Water	(4thvol 1st part pg no – 37)
9.	சீதம் விழல்	குடலினின்று சீதம் கழிதல்	Abine discharge as dysentery	(4thvol 1st part pg no – 37)

10.	செந்நீர்	இரத்தம்	Blood	(4thvol 1st part pg no – 473)
11.	வாட்டம்	சோர்வு	Fatigue	(5th vol pg no – 1042)
12.	கருகுதல்	நிறங் கருத்தல்	Getting scorched as the face is	(2ndvol pg no – 1220)
13.	உடல்	உடம்பு	Body	(1st vol pg no – 1050)
14.	வெளுப்பு	வெளுத்தல், வெண்மை	To become white, Whiteness	(5thvol, pg no – 1220)
15.	மயக்கம்	சோம்புதல், சோர்வு	Drowsiness Weakness	(5thvol pg no – 701)
16.	தியக்கம்	மயக்கம்	Giddiness	(4thvol 1st part pg no – 1050)
17.	அசனம்	உணவு	Food	(1stvol, pg no – 06)
18.	அழலல்	அழலுதல் - எரிதல் வெம்மை செய்தல், வெப்பம் கொள்ளல்	Burning To get inflammed becoming hot	(1stvol pg no – 380)
19.	புளிப்பு	ஓர் சுவை	One of the six tastes, sour	(5thvol pg no – 515)

Table.8 Light From Lenicons

ANALOGY BETWEEN THE LINES FO YUGI VAITHIYA CHINTHAMANI AND MODERN TEXT

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM) "கொள்கையாய்ப் பேதமாய் வயிறுளைந்து"
QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE ➢ "Extensive colitis causes bloody diarrhoea with passage of mucus, in severe cases anorexia, malaise, weight loss and **abdominal pain** occur....." *Ref: Davidson's principles of practice medicine 19th edition,2005,Pg no 810.* ➢ "The majorty of patients with Crohn's disease complain of diarrhoea (70-90%), **abdominal pain** (45-66%) and weight loss (65-75%)....." *Ref: "Oxford Textbook of Medicine 4th edition (March 2003):by David A. Warrell (Editor), Timothy M. Cox (Editor), John D. Firth (Editor), Edward J., J R., M.D. Benz* *(Editor) By Oxford Press, pg no:606* ➢ **"**some patients with active disease may experience vague lower **abdominal discomfort** and abdominal cramping……**"** *Ref: "Harrison's manual of medicine" 16th edition: by longo, Fauci, Kasper, Hauser,Braunwald, and Jameson, pg no:1779.* ➢ "ulcerative colitis may be accompanied by lower **abdominal discomfort**……..." *Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:305.* ➢ **"**The predominant symptoms of Crohn's disease are diarrhoea, **Abdominal pain** and weight loss…….**"** *Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 862*

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM)

"கொடிதான கனல் தானுங் கபாலமேறி"

QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE

- "Limited disease develop **fever**, lethargy, and abdominal discomfort……."

Ref: Davidson's principles of practice medicine 19th edition,2005,Pg no 810.

- "**Fever** is also common (30-49%), inthe patients of Crohn's disease obstructive symptoms (colic, vomiting) are much more commonly associated with ileal disease than colonic Crohn's disease ……"

Ref:"Oxford Textbook of Medicine 4th edition (March 2003):by David A. Warrell (Editor), Timothy M. Cox (Editor), John D. Firth (Editor), Edward J., J R., M.D. Benz (Editor) By Oxford Press, pg no:606

- "Other symptoms in moderate to severe disease include anorexia, nausea, vomiting, **fever**, and weight loss……."

Ref: "Harrison's manual of medicine" 16th edition: by longo, Fauci, Kasper, Hauser,Braunwald, and Jameson, pg no:1779.

- "Low-grade **fever** may be present and in 15% of these patients there are no gastro intestinal symptoms……"

Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:302.

- "Systemic features- **fever**, malaise, and weight loss are common if all or most of the colon is involved to function……"

Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 862

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM)

"வள்கையாய்ச் சீதமாய்ச் செந்நீர் பாய்ந்து"

QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE

- "proctitis causes **rectal bleeding and mucus discharge**, sometimes accompanied by tenesmus".
- "proctosigmoiditis causes **bloody diarrhoea with mucus**".
- "Extensive colitis causes **bloody diarrhoea with passage of mucus**".
- "Crohn's colitis in an identical manner to ulcerative colitis, with **bloody diarrhoea with mucus**"

Ref: Davidson's principles of practice medicine 19th edition,2005,Pg no 810, 811.

- "The principal symptoms include **diarrhoea, rectal bleeding, the passage of mucus**, and less frequently, abdominal pain".

Ref:"*Oxford Textbook of Medicine 4th edition (March 2003):by David A. Warrell (Editor), Timothy M. Cox (Editor), John D. Firth (Editor), Edward J., J R., M.D. Benz (Editor) By Oxford Press, pg no:614*

- "The major symptoms of UC are **diarrhoea, rectal bleeding**, tenemus, **passage of mucus**, and crampy abdominal pain……."
- "Patients with proctitis usually pass fresh blood or **blood-stained mucus, either mixed with stool or streaked onto the surface of normal stool"**

Ref: "Harrison's manual of medicine" 16th edition: by longo, Fauci, Kasper, Hauser,Braunwald, and Jameson, pg no:1779.

- "The major symptom in ulcerative colitis is **diarrhoea with blood and mucus**……"

Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:305.

- "The dominant symptom in ulcerative colitis is **diarrhoea, which is usually associated with blood in stool**……."

Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 862.

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM)

"உடல் வெளுத்து"

QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE

- "Physical examination often reveals evidence evidence of weight loss, **anaemia** with glossitis and angular stomatitis……..."

Ref: Davidson's principles of practice medicine 19th edition,2005,Pg no 811.

- "Symptoms of **anaemia are common** and usually occur as a result of iron deficiency from intestinal blood loss or, less frequently, from Vitamin B12 or folate deficiency.

"However, many of these patients are obviously ill, with fever, salt and water depletion, **anaemia**, and evidence of weight loss……."

Ref:"*Oxford Textbook of Medicine 4th edition (March 2003):by David A. Warrell (Editor), Timothy M. Cox (Editor), John D. Firth (Editor), Edward J., J R., M.D. Benz (Editor) By Oxford Press, pg no:606,614*

- "Ulcerative colitis disease presentation: **Anaemia** will present in > 75%....."

Ref: "Harrison's manual of medicine" 16th edition: by longo, Fauci, Kasper, Hauser,Braunwald, and Jameson, pg no:1779.

- "In moderate to severe attacks an iron deficiency **anaemia** is commonly present……"
- "**Anaemia** is common and is usually normocytic, normochromic **anaemia** of chronic disease……"

Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:306.

- "**Anaemia** and an elevated leukocyte count and erythrocyte sedimentation rate are useful in confirming severe disease and in following the clinical course of a severe exacerbation……."

Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 862

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM)

“மள்கையாய் மயக்கமொடு தியக்கமாகி”

QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE

In patients with inflammatory bowel disease excessive bleeding is common. Excessive bleeding may result in Anemia. So, **dizziness or weakness**, one of the symptom of Anemia which is present in the patients of Inflammatory bowel disease.

- “…..……..When anaemia develop rapidly, shortness of breath , tachycardia, **dizziness or faintness** (particularly upon arising from a sitting or recumbent posture), and extreme fatigue are prominent……..”

Ref: Wintrobe’s clinical hematology, 13th edition, Edited by John P.Greer, Daniel A.Arber, Alan F. List, Robert T. Means,Jr., FrixosParaskevas, George M. Rodgers, Pg no. 590

- “…..……..Clinical manifestations of Anemia: **Weakness**, fatigue, lethargy, palpitations, dyspnea on exertion, orthostatic light handedness, re common symptoms in patients with anaemia.…..……..”

Ref: Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 967

- “……Symptoms of Anemia: Fatigue, **Faintness or dizziness,** Headaches are all very common in the general population…….”

Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:411.

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM)

“வாறான வசனமிகத் தானுஞ் செல்லா”

QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE

- “Constitutional symptoms including lethargy, malaise, **anorexia** and weight loss……..”

Ref: Davidson’s principles of practice medicine 19th edition,2005,Pg no 811.

- “Patients are usually **anorexic**, nauseated, and have lost weight……...”

Ref:“Oxford Textbook of Medicine 4th edition (March 2003): by David A.Warrell (Editor), Timothy M. Cox (Editor), John D. Firth (Editor), Edward J., J R., M.D. Benz (Editor) By Oxford Press, pg no:614

- “Other symptoms in moderate to severe disease include **anorexia**, nausea, vomiting, fever, and weight loss……..”

Ref: “Harrison’s manual of medicine” 16th edition: by longo, Fauci, Kasper, Hauser, Braunwald, and Jameson, pg no:1779.

- “Constitutional symptoms of malaise, lethargy, **anorexia,** nausea, vomiting and low-grade fever may be present and in 15% of these patients there are no gastro intestinal symptoms……..”
- “General features include malaise, lethargy and **anorexia**……..”

Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:302,305.

- “Malabsorption or **diminished intake** because of pain, diarrhoea, or **anorexia**…….”

Ref: Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 862

YUGI VAITHIYA CHINTHAMANI PHRASE (VANNI PITHAM)

"நள்கையாய் நாவழன்று புளிப்பு காணும்"

QUOTINGS FROM MODERN TEXT ABOUT INFLAMMATORY BOWEL DISEASE

In patients with inflammatory bowel disease excessive bleeding is common. Excessive bleeding may result in Anemia. So, **glossitis**, the symptom of Anemia which is present in the patients of Inflammatory bowel disease.

- Clinical effects of Anemia, Gastro intestinal changes

"……. **Glossitis** and atrophy of Papillae of the tongue commonly occur in pernicious anemia and iron deficiency anemia……."

Ref:Wintrobe's clinical hematology, 13th edition, Edited by John P.Greer, Daniel A.Arber, Alan F. List, Robert T. Means,Jr., FrixosParaskevas, George M. Rodgers, Pg no. 589

- "……Iron deficiency anemia has several characteristic clinical manifestations, **Glossitis** (A sour tongue), atrophy of the lingual papillae, and erosions at the corners of the mouth (Angular stomatitis) are the oral manifestations of the iron deficiency……"

Ref: Cecil text book of Medicine 22nd edition, edited by goldma, Ausiello, pg no: 1005

- "……..Clinical features of Iron deficiency Anemia: A syndrome of dysphagia and **glossitis,** angular stomatitis, brittle hair, brittle nails, atrophy of the papillae of the tongue……"

Ref:Kumar& Clark Clinical Medicine 5th edition, edited by Parveen Kumar, Michael Clark, pg no:414.

- "…….clinical symptoms of Iron deficiency anemia: Patients may have angular stomatitis, atrophic **glossitis**, koilonychia, brittle hair……."

Ref:Manual of practical Medicine, 4th edition, edited by R.Alagappan, 2011,Pg no:350.

5. A VIEW ON PITHAM

The natural shape of Pitham is Atomic. It is sharp and hot. The ghee becomes watery, salt crystalizes and jaggery melts because of heat. The heat of Pitham is responsible for many actions and their reactions.

பித்தம் உருவாகும் விதம்

"இருப்பான நாடி எழுபதோடீரா
யிரமான தேகத்தில் ஏலப் பெருநாடி
ஒக்கதசமத் தொழிலை ஊக்க தசவாயுக்கள்
தக்கபடி என்றே சாரும்
சாருந் தசநாடி தன்னில் மூலம்மூன்று
பேருமிடம் பிங்கலையும் பின்னலுடன் மாறும்
உரைக்க விரற்காற்றோட்டுணர்த்துமே நாசி
வரைச் சுழியோ மையத்தில் வந்து
வந்தகலை மூன்றில் வாயுவாமபானனுடன்
தந்த பிராணன் சமானனுக்குங் சந்தமறக்
கூட்டுறவு ரேகித்தால் கூறும் வாதம் பித்தம்
நாட்டுங் கபமேயாம் நாடு"

- சித்த மருத்துவாங்க சுருக்கம்

The seats of Pitham

“தானான பித்தம் பிங்கலையைப்பற்றிச்
சாய்வான பிராணவாயு வதனைச் சார்ந்து
ஊனான நீர்ப்பையிலணுகி மூலத்
துதிதெழுந்த வக்கினியை யறவு செய்து
மானகே ளிருதயத்தி லிருப்பு மாகி
கோனான சிரந்தனிலே யிறக்க மாகிக்
கொண்டுநின்ற பித்தநிலை கூறினோமே”

-தமிழ் வைத்திய சாதகம்

According to Tamil Vaithiya Sathagam, the pingalai, urinary bladder, stomach, sweat, blood, is the places where Pitham sustains.

In addition to the above place, the umbilical, epigastric region, stomach, sweat, blood, essence of food, eyes and skin are also the place where Pitham sustain.

Yugi Muni says that the Pitham sustains in urine and the places below the neck.

Thirumoolar also says that Pitham sustains in urine.

According to 4448 Viyathigal

1. வயிறு
2. ரசதாது
3. இரத்தம்
4. ஊன்
5. வியர்வை
6. கண்கள்
7. பொதுவாக தொப்பூழுக்கு மேல் இருதயத்துக்குக் கீழ் உள்ள பகுதிகள்

There are the seats of Pitham.

THE CHARACTERISTICS OF PITHAM

According to Maruthuva - Thanipadal

"பசிதாகம் ஓங்கொளிகண் பார்வைபண் டத்து
ருசிதெரி சத்தி வெம்மைவீரம் - உசித
மதிகூர்த்த புத்திவனப் பளித்துக் காக்கும்
அதிகாரி யாங்கா னழல்"

- மருத்துவ தனிப் பாடல்

Pitham is responsible for Digestion, Vision, Maintenance of body temperature, Hunger, Thirst, Taste etc., its other functions include Thought, Knowledge, Strength and Softness.

According to Thirumoolar Karukkidai Vaithiyam – 600 Pitham produces

- Bitter taste in tongue
- Different kinds of thoughts
- Increased salivation
- Burning sensation in the body
- Increased heat in the body
- Tremors of the body

According to Pathinen Siddhargal Naadi Sasthiram

"பகுத்திடும் பித்தம் பலபலசிந்தையாம்
வகுத்திடும் வாந்தியும் வாய்நீர்மிகவூறும்
மிகுத்திடும் மேனியின்மாட்டி யெரிப்பேறும்
மிகுத்துத் தவனிக்கு மிகவிடந்கைக்குமே"

- பதினென் சித்தர்கள் நாடி சாஸ்திரம்

According to Pathinen Siddhargal Naadi Sasthiram, the character of Pitham is vomiting, increased salivation, burning sensation of the body and kaippu in the tongue.

According to 4448 Viyathigal, the characteristic features of Pitham is,

1. நெய்ப்பு
2. மெலிவு
3. சூடு
4. வேகம்
5. நாற்றம்
6. அசையும் தன்மை
7. நெகிழ்ந்தோடுதல்

- 4448 வியாதிகள்

பித்தம் வரலாறு

"பாரடா பித்தமென்ற கிரிச்சனந்தான்
பதினெட்டு வகையாகப் பயித்ததேது
வூரடா யிருக்கின்ற பெரியோர் தம்மை
யொருக்காலே பழித்ததனால் வந்தபாவம்
சீரடா பாராமல் தூக்ஷணித்தல்
சிவத்தலங்க லதைப்பழித்தல் சிவமேசெய்தல்
ஆரடா கோபமென்ற பாவத்தாலே
யப்பனே பித்தமது சிரசின் மேலே
மேலேறி யதரந்தனை யெழும்பி
மேகமென்ற புரவியது போலேயாச்சு
மாலேறி பித்துக்கும் பிரமைதொன்றி
மனம்விட்டுக் கூத்தாடி வெளியேயாகிக்
கலேறிப் பசாசுபோற் றிரிந்ததென்ற
காரண்ட கோபமென்ற கருமத்தாலே
பால்போலு மனமுடைய பெரியோர் சாபம்
பலித்துதடா புத்தி கெட்ட பரிசதாமே."

- அகத்தியர் கன்ம காண்டம்-300

According to Agathiyar Kanma Kaandam, due to the above factors the Pitham Humour may get deranged.

THE FUNCTIONS OF PITHAM

1. Maintain body temperature.
2. Produces reddish or yellowish colour of the body.
3. Produces heat energy on digestion of food.
4. Produces sweating.
5. Induce giddiness
6. Produces blood and the excess blood is let out.
7. Gives yellowish colouration to Skin, Eyes, Faeces and urine.
8. Produces anger, burning sensation, inaction and determination.
9. Gives bitter or sour taste.

பித்தம் பிரகோபிக்கக் காரணங்கள்

"ஆயுறு பித்த கோப மதிசெயம் வெப்புத் தாகம்
தோய்வுறு மயர்வு மூச்சுச் சொன்மதம் புத்திபேதம்
பாயுறு முனிவு வீரம் பரவிய புளிப்பிலின்பம்
வாயுறு முதிரகண்கள் மலஞ்சலம்மஞ்சளாகும்
குணம்பெறும் முகங்கள் மேனி கூர் சிரந்திரங்கி வற்றல்
கணம்பெறும் மனம்வேறாகக் கட்டிடுங் குளிர்காலத்தில்
மணம்பெறுசலமேற் றாகம் வைத்து நாடிடும்பின்வெப்பால்
நிணம்பெறு மதிசாரத்தை நீட்டிடுமுனிவய்பித்தம்".

- அங்காதிபாதம்

According to Angathi Patham, the deranged Pitham produce anger, increased thirst, tiredness, confusion, increased intake of sour taste in diet, yellowish colouration of eyes, urine and faeces, delusion and finally results in fatty diarrhea.

“பிணிதரு பித்த கோபம் பெருகவுண்டாகுமுண்டி
கணிதரு மடிற்சியுப்புப்புளிப்புறைப் பதிகத் தாலும்
பணிதரு மதுவினாலும் பாரண மிகுதலாலு
மணிதரு வெயர்வு வெய்யில் வழிநடை முனிவினாலும்”.

-அங்காதிபாதம்

According to Angathi Patham. Increased intake of uppu, pulippu, uraippu in diet, alcohol and prolonged exposure to sun will derange the Pitham humour.

According to Therayar Vaagadam,

“உரத்த பித்தங் கோபித்தா
லுள்ள முழலை நெஞ்சுவற்றுஞ்
சுரத்தில் சிரசு பாரித்தல்
துடித்தல் வெந்தல் நீர்பாய்தல்
விரைத்தல் பிதற்றல் மூர்சித்தல்
மிக்க மயக்கங் கண்ணெரிதல்
பெருத்த வாயுங் கைப்பினொடு
புளிப்பும் வேண்டியிருக்குமண்றே”.

- தேரையர் வாகடம்

According to Therayar Vaagadam, the deranged Pitham produces following

- Fever with heaviness of head
- Hardening of muscles and joints
- Giddiness
- Burning sensation of eyes
- Bitter taste in tongue
- Fond of sour taste

"நித்திரை தவிதலாலும் நெடுநேரம் நிற்கையில்
குத்திர விதத்தினாலுங் கொம்பனார் மருந்திட்டாலும்
சுத்தியில் லாதேகொண்ட அவுஷத தோஷத்தாலும்
பித்தமே பிரகோபித்துப் பெருந்துயர் செய்யுந்தானே"

According to Thanvandhiri Vaithiyam, prolonged standing, sleeplessness and unpurified medicines will derange the Pitham humour.

பித்தம் வரும் வழி:

"எண்ணும் பத்தம் வரும் வகைகேள் கோபத்தாலும்
ஏந்திழையை மனம் பிரியாதிருக்கையாலும்
துண்ணெண வெட்டான பழியினாலும்
துர்க்கந்தம் சவப்புகையை கூட்டினாலும்
கண்ணிமை மூடாதொரு துவேகத்தாலும்
கருவிபடும் வகையாலும் காயத்தாலும்
எண்ணமுடன் மனமுளவினால் வருத்தத்தாலும்
இயல்பான போசனமில்லா திருந்திட்டாலும்
இட்டங்கைமுதல் கொள்ளை போனதாலும்
எதிராளி பகைத்தலும் இன்னும் செய்யும்
துட்ட தேவதை சாத்தான் பிடாரி அய்யன்
துர்க்கைரென காளி துடற்சை யாலும்
முட்டான பில்லி வஞ்சனையினாலும்
மூதேவி யிடுகருக்கன்முளையினாலும்
அட்டான தேசாடை யலச்சாலும்

ஆழிகப்ப லேறியே அலைந்தாலுந்தானே
ஆல விழமேறியே உறங்கிட்டாலும்
அந்தி தூக்கங்களில்லாதான தாலும்
சூலுதனை வயிற்பிளக்க கண்டிட்டாலும்
துய்யகள்ளற் தீயாலும் தோசத்தாலும்
வாலை வயதான பேர் நிமிஷத்துள்ளே
மரித்தாலும் கள்ள பெண்டீர் மரித்திட்டாலும்
ஞாலமதிலார் சிவயோக ஞான நாட்டத்தில்
மிகுந்தாலும் நாடும் பித்தம்"

-அகத்தியர் கனக மணி

According to Sathaga Naadi,

பித்த நாடி

உறுதியுள்ள பித்தமது தோன்றில் வெப்பு
உஷ்ணவாயுவத்தி சுரமதி சாரங்கள்
மறதியுடன் கிறுகிறுப்பு பயித்திய ரோகம்
வளர் சோகையழலெரிவு காந்தல் கைப்பு
இருதயத்தில் கலக்கமது மறப்பு தாகம்
எழுங்கனவு மேயனைவு மயக்க மூர்ச்சை
சிறிது பெரும்பாடு ரத்தப் பிரமேகங்கள்
சேர்ந்து மிகு பிணி பலவுஞ் சிறக்குந்தானே

- சதக நாடி

பித்த வாத நாடி

சிறப்பான பித்தத்தில் வாத நாடி
சேரிலுறுந்தாது நட்ட முதர பீடை
உறைப்பாகச் செரியாமைகுன்மஞ்சூலை
யுற்றசுரங்கிராணி வயிற்றிரைச்சல் மந்தம்
அறைப்பான ஓங்கார புறநீர்க்கோவை
ஆயாசமிரக்க மொடு மயக்க மூர்ச்சை
முறைக்காய்வு விஷவீக்கம் மூலவாய்வு
முரடான நோய் பலவு முடுகும்பண்பே

- சதக நாடி

பித்த கப நாடி

பண்பான பித்தத்தில் சேத்தும நாடி
பரிசித்தா லத்திசுர மிளைப்பு ஈளை
கண் காது நயன மலம் நீருமஞ்சள்
கனவயிறு பொருமல் மஞ்சள்நோய் கண்ணோவு
உண்போது மறுத்தல் ரத்தவிப்புருதி தானும்
உளைமாந்தை பீனிசமும் ரத்த வீக்கம்
நண்பான காமாலை சோகை வெப்பு
நணுகிவந்த பல பிணியும் நண்ணுந்தானே

- சதக நாடி

TYPES OF PITHAM

The Pitham is of five types depending upon the locations and functions of as follows

1. Aakkanal (Anal - Pasaka - Pitham) The fire of digestion

"அழலைவகைத் தென்பரதில் முதன்மை பெற்ற
தாக்கனல்தான் ஐம்பூத மயமாய்மற்றைத்
தழலையரந் தந்துபுரந் தருமால் உண்ட
சாதத்தைச் செரிப்பித்தி ரசத்தைக் கொண்டு
கழலைவிடுந் திப்பிகளை இரப்பைக்குமடுங்
காரியஞ்செய் தானத்துக் கிடையே குடியாய்
மழலைமொழி மாதேகேள் சமைக்குமித்தை
வழங்கவர்காண் பாசகமா மனல்தா நென்றே"

- மருத்துவத் தனிப் பாடல்

It lies between the stomach and the intestine and causes digestion and dries up moist ingested substances.

2. Vannaeri (Ranjaga Pitham) - blood promoting fire

This lies in the stomach and gives red colour to the chyme and produce blood. It improves blood

"இரைப்பைவாழ் வண்ணவெரி இறங்கிப் போந்த
எல்லாவூண் டனக்குமாற்று நிறமொன் றீந்தே

விரைவிலன்ன சத்தெல்லாம் அடுஞ்சாலைக்கே
மேவவைப்ப திரத்தமொட்டு மிதயத் தேய்ந்து
நிறைந்தாற்ற லங்கிநாளும் மதிசேர் மெதை
நெறிவலியால்விரும்பியாங்கு பணிசெய் தெநல்
வரைசெறிமெல் லோதிங்காய் புரக்கும் மெய்யை
விளம்புரச கஞ்சாதக முறையே யாமே"

- மருத்துவ தனிப் பாடல்

3. Aarralanki (SaathagaPitham) - The fire of energy

It controls the whole body. It has the property of fulfillments.

4. Oozhi thee (PrasagaPitham) - The fire of brightness

It gives colour and complexion and brightness to the skin.

5. Nokkazhal (AlosagaPitham) - The fire of vision

"உரியொளிசெய் யழல்தங்குந் தோலிலத்தை
யொள்ளொளித்தீ யெனவிளிப்பர்மீனேய்வாட்சேல்
வரிகொள்க்கி நடுவிருந்து கண்ட காட்சி
வகை விளக்க மறிவிக்கும் நோக்குமங்கி
விரியுள நூல்வல்நாவர் கூறுங் காந்தி
மிகுப்பிராச கமாலோச கங்கலென்று
தெரிவுளத்தே செயல்முறைப் பித்தமைந்தின்
திகழொளி கூர்விழியணங்கே ஐய நீந்தே"

- மருத்துவத் தனிப் பாடல்

It lies in the eyes and causes the faculty of vision. It helps to visualize things.

Types of Pitha diseases

According to Jeeva Rakshamirutham, Pitha diseases classified into forty types. They are,

1. ரத்த பித்தம்
2. ஆவர்ண பித்தம்
3. ஆம்ல பித்தம்
4. உன்மாத பித்தம்
5. விஷ்மிகுதி (மறதி)
6. திக்தமிகுதி(கசப்பு)
7. ஆசியாபாக பித்தம்
8. ஜிம்மிக பித்தம்
9. துர்க்கந்த பித்தம்
10. தத்துரு பித்தம்
11. சோக பித்தம்
12. மூர்ச்சை பித்தம்
13. கண்டு பித்தம்
14. பிடாக பித்தம்
15. அனல பித்தம்
16. காமில பித்தம்
17. இதம பித்தம்
18. சூலை பித்தம்
19. விஷ்டம்ப பித்தம் (திகைத்தல்)
20. சுவேத பித்தம்
21. விரண பித்தம்
22. ஊர்த்துவ பித்தம்
23. சுவாச பித்தம்
24. செம்பித்தம்
25. கரும்பித்தம்
26. துடி பித்தம்
27. எரி பித்தம்
28. கரப்பன் பித்தம்

29. விஷம பித்தம்
30. மூல பித்தம்
31. கள பித்தம்
32. ஓடு பித்தம்
33. மூடு பித்தம்
34. நடுக்கு பித்தம்
35. கபால பித்தம்
36. தாக பித்தம்
37. திமிர் பித்தம்
38. வலி பித்தம்
39. கிருமி பித்தம்
40. மருந்தீடு பித்தம்

Types of Pitham according to DhanvanthiriVaithiyam,

1. பிரதான பித்தம்
2. பக்குவாசய பித்தம்
3. ஆமாசய பித்தம்
4. சய பித்தம்
5. ரத்த பித்தம்
6. மாங்கிச பித்தம்
7. மேதோ பித்தம்
8. அத்தி பித்தம்
9. மச்சை பித்தம்
10. சுக்கில பித்தம்
11. சுரோணித பித்தம்
12. சந்திகத பித்தம்
13. உதர பித்தம்
14. மலாசய பித்தம்
15. வாத பித்தம்
16. சிலேற்பன பித்தம்
17. வாதசிலேற்ப பித்தம்
18. பிராணபயித்திய பித்தம்

19. பயித்திய பித்தம்
20. வீரான பித்தம்
21. மார்பாமபயித்தியம்
22. அன்ன பித்தம்
23. ஆம பித்தம்
24. குண்டலி பித்தம்
25. கபால பித்தம்
26. அம்ருத பித்தம்
27. நேத்திர பித்தம்
28. மச்ச பித்தம்
29. மலத்தில் ரத்த பித்தம்
30. இக்கு பித்தம்
31. ஆம்ல பித்தம்
32. பயித்திய வனபித்தம்
33. இருதய பித்தம்
34. மூல பித்தம்
35. சர்வாங்க பித்தம்
36. உன்மத்த பித்தம்
37. மோக பித்தம்
38. வாசய பித்தம்
39. மேக பித்தம்
40. கன்ம பித்தம்

Types of Pitham according to Therayar Vaagadam,

21 வகை பித்தம்

1. அழல் பித்தம்
2. சுழல் பித்தம்
3. மயக்கும் பித்தம்
4. குழல் பித்தம்
5. இருள் பித்தம்
6. சித்தவிப்பிரம பித்தம்
7. ஆமல பித்தம்

8. அஞ்சகரப்பித்தம்
9. சுளிப்பித்தம்
10. ஆவுரு பித்தம்
11. நேத்திர பித்தம்
12. மவுன பித்தம்
13. சுக்கில பித்தம்
14. மதி பித்தம்
15. விரண பித்தம்
16. ஓடல் பித்தம்
17. நிலைகொள்ளாத பித்தம்
18. காமாலை பித்தம்
19. இளம் பித்தம்
20. சத்தி பித்தம்
21. அறிவழிந்த பித்தம்

Types of Pitham according to Agasthiyar Vaithiya Chinthamani - 4000

24 வகை பித்தம்

1. அசீரண பித்தம்
2. விவர்ண பித்தம்
3. சூரியவர்ண பித்தம்
4. காமாலை பித்தம்
5. கீர பித்தம்
6. இரத்தப்பிரம பித்தம்
7. ஆமில பித்தம்
8. பிண்டரீகப் பித்தம்
9. சுவேத பித்தம்
10. புசங்க பித்தம்
11. கரபாத பித்தம்
12. சீத பித்தம்
13. மூர்ச்சை பித்தம்
14. குசும பித்தம்
15. குரோத பித்தம்

16. பிரமை பித்தம்
17. சென்னி பித்தம்
18. சுதாக பித்தம்
19. திருட்டின பித்தம்
20. துர்ப்படா பித்தம்
21. சரும பித்தம்
22. துர்க்கந்த பித்தம்
23. மதன பித்தம்
24. இந்திர பித்தம்

Types of Pitham according to Sarabendrar Vaithiya Muraigal (Pitha Roga Sigichai)

23 வகை பித்தம்

1. அசீரண பித்தம்
2. ஆமில பித்தம்
3. நேத்திர பித்தம்
4. காமாலை பித்தம்
5. மூர்க்கபிரம பித்தம்
6. விவரண பித்தம்
7. குசும பித்தம்
8. சுவேத பித்தம்
9. புசந்க பித்தம்
10. சுஹாந்தா பித்தம்
11. பிரம பித்தம்
12. சீத பித்தம்
13. தமபாகூ பித்தம்
14. சூரியவர்ண பித்தம்
15. குரோத பித்தம்
16. ரக்த பித்தம்
17. காமில பித்தம்
18. மதுரப்பித்தம்

19. கிருட்டிண பித்தம்
20. சிரோ பித்தம்
21. சேத்ம பித்தம்
22.துர்க்கெந்த பித்தம்
23.மரண பித்தம்

Types of Pitham according to Roga Nirnaya Saaramennum Roga Nithanam by T.R. Mahadeva pandithar

40 வகை பித்தம்

1. விஷ்டம்ப பித்தம்
2. அலை பித்தம்
3. சூலை பித்தம்
4. கொட்டாவி பித்தம்
5. விக்கல் பித்தம்
6. சுவேத பித்தம்
7. எரி பித்தம்
8. கரும் பித்தம்
9. செம்பித்தம்
10. கரப்பான் பித்தம்
11. சுவாச பித்தம்
12. ஊர்த்துவ பித்தம்
13. ரண பித்தம்
14. மருந்தீடு பித்தம்
15. கிருமி பித்தம்
16. வலி பித்தம்
17. திமிர் பித்தம்
18. தாக பித்தம்
19. கபால பித்தம்
20. துடி பித்தம்
21. விஷம பித்தம்
22. மூல பித்தம்

23. கள பித்தம்
24. ஓடு பித்தம்
25. நடுக்கு பித்தம்
26. பிட்ட பித்தம்
27. மூர்ச்சை பித்தம்
28. கண்டு பித்தம்
29. துனை பித்தம்
30. துர்க்கந்த பித்தம்
31. மதுர பித்தம்
32. தத்துரு பித்தம்
33. ஆசியாபாக பித்தம்
34. ஆவரண பித்தம்
35. கசப்பு பித்தம்
36. விச்மிருதி பித்தம்
37. உன்மாத பித்தம்
38. இரத்த பித்தம்
39. ஆமல பித்தம்
40. ஓடு பித்தம்

VANNI PITHAM

Pitha Rogam has so many Classification. Vanni Pitham is one of the Forty Types of Pitha Disease

The Dissertation subject Vanni Pitham is from Yugi Vaithiya Chinthamani

வன்னி பித்தம்

கொள்கையாய் பேதமாய் வயிறுளைந்து
கொடிதான கனல் தானுங் கபாலமேறி
வள்கையாய்ச் சீதமாய்ச் செந்நீர் பாய்ந்து
வாட்டமாய்க் கருகியே உடல் வெளுத்து
மள்கையாய் மயக்கமொடு தியக்கமாகி
வாறான வசனமிகத் தானுஞ் செல்லா
நள்கையாய் நாவழன்று புளிப்பு காணும்
நளினமாம் வன்னி பித்த நாட்டலாமே

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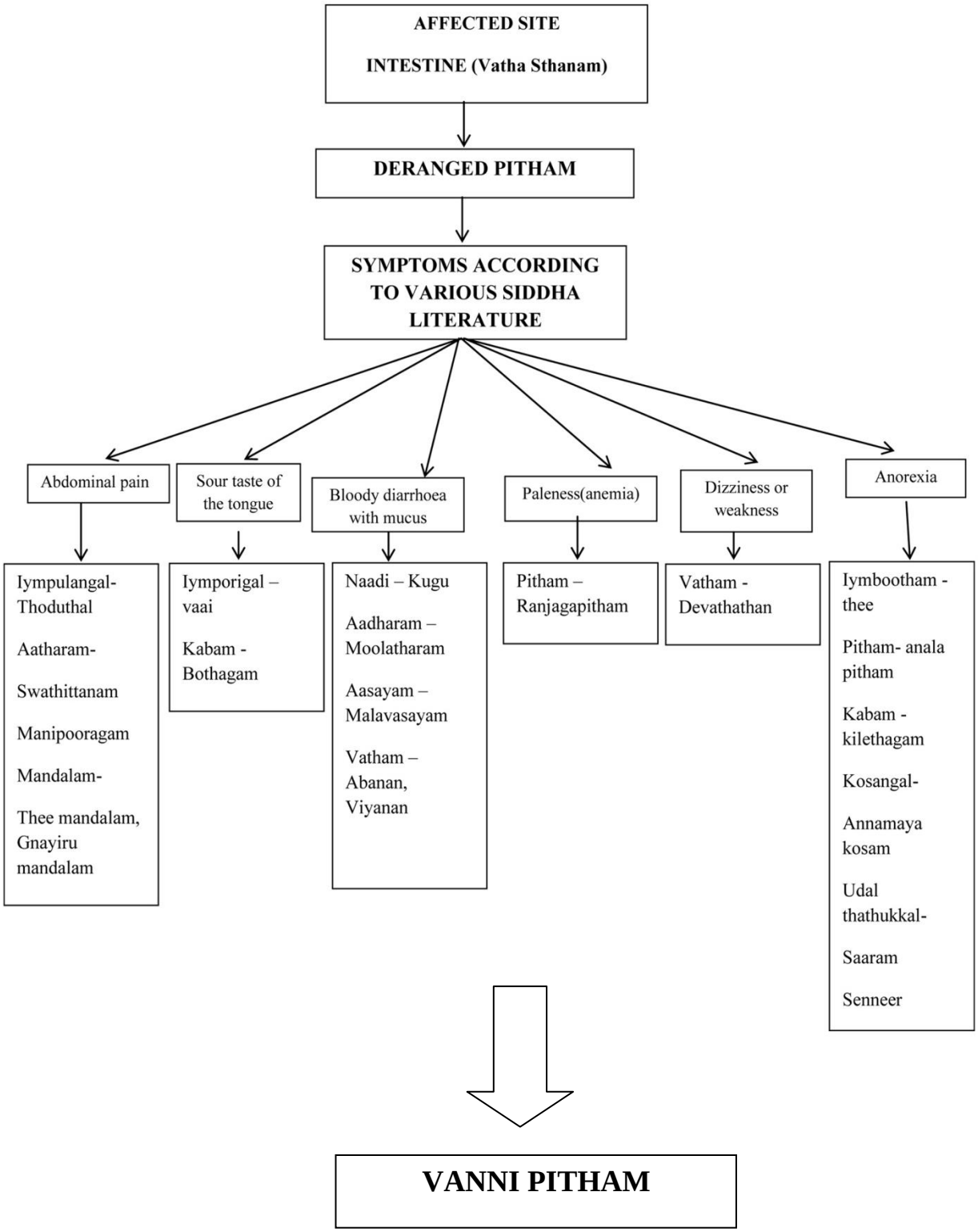
CLINICAL FEATURES:

- Abdominal Pain
- Fever
- Bloody diarrhoea with mucus
- Paleness (Anemia)
- Dizziness or Weakness
- Anorexia
- Glossitis with Sour taste of the tongue

6. PATHOGENESIS OF VANNI PITHAM



PATHOGENESIS OF VANNI PITHAM

The basic constitution of the body is made up of 96 Thathuvams. Due to and other activities 96 Thathuvams get deranged and result in diseases, either pertaining to body or mind.

DERANGED 96 THATHUVAS ARE AS FOLOWS

1. **AYMBOOTHAMS (FIVE ELEMENTS)**

   Thee – thee is the constituent of pitha humour when affected produce Anorexia. In vanni Pitham, Pitham is affected in the place of Vatham. (i.e) intestine is the place of Vatham in which deranged Pitham causes illness.

2. **IYMPORIGAL (PENTA SENSORS)**

   Vaai – sour taste of the tongue

3. **IYMPULANGAL (FUNCTIONS OF PENTA SENSORS)**

   Thoduthal (Touch) – abdominal discomfort or boring pain in abdomen

4. **ANDHAKARANAM(STATIONS OF SOUL)**

   Manam – Depression due to illness.

5. **NAADI (DIFFERENTIAL PULSE PERCEPTION)**

   Kugu – Bloody diarrhoea with mucus

6. **AADHARAM (STATIONS OF SOUL)**

Moolathaaram	-	Bloody diarrhoea with mucus
Swathitanam	-	Abdominal discomfort
Manipooragam	-	Abdominal discomfort

7. **MANDALAM**

Thee mandalam	-	Abdominal discomfort
Gnayirumandalam	-	Abdominal discomfort

8. **PATHINAANGU VEGANGAL (NATURAL URGES/ REFLEXES)**

Abanavayu	-	Constipation
Kottavi	-	Abdominal discomfort
Pasi	-	Dizziness
Suvasam	-	Abdominal discomfort

9. AASAYAM

Malavasayam- Bloody diarrhoea with mucus

10. DERANGED UYIR THATHUKKAL (HUMOURAL OR TRIDOSHA PATHOLOGY)

Panchaboothams manifests in the body as three vital forces, Vatham, Pitham and Kapham

DERANGED VATHAM OR VAYU

In vanniPitham primary affected vayukkal are Abanan, Samanan, Viyanan, Kirukaran and Devadathan

Types of Vatham	Derangements
Abanan	It is the Vatham, which is responsible for bloody diarrhoea with mucus
Samanan	It is the Vatham, which responsible for normal function of other Vatham
Viyanan	It is affected because unable to do regular activities by bloody diarrhoea with mucus
Devadaththan	It is the Vatham responsible for lethargy

DERANGED PITHAM

In vanniPitham, primarily affected Pitham is SaathagaPitham.

Types of Pitham	Derangements
Anala Pitham	Anorexia
Ranjaga Pitham	Paleness (Anaemia)
Saathga Pitham	Difficulty to concentrate in work due to bloody diarrhoes with mucus

DERANGED KAPHAM

In vanniPitham, primarily affected kabam is

Types of kapham	Derangements
Kilethagam	Anorexia
Bothagam	Sour taste of the tongue

11. DERANGED UYIR THATHUKKAL

Saaram (miguguman) –Anorexia

Senneer (migugunam) – Anorexia

12. KOSAM (BODY SYSTEMS)

a) **Annamaya kosam –** affected

Annamaya kosam is affected because of 7 udalthathukkal forming this kosam are affected.

b) **Praanamaya kosam –** Not affected

c) **Manomaya kosam –** Affected

It is affected because patient feels sorrow about the illness.

d) **Vignanamaya kosam –** Affected

It is affected because Gnanenthirium forming this kosam are affected.

e) **Aanandhamaya kosam –** Affected

It is affected because patient feels unhappy due to the illness. According to various literatures in siddha system the deranged Pitham produces many symptoms such as Abdominal discomfort, fever, bloody diarrhoea with mucus, paleness, anorexia, sour taste of the tongue, etc.,

Humour affected	Udalthathukkal affected	Clinical presentation
• VATHAM Abanan Samann Viyanan Devathatthan	Saaram (Migugunam) Senneer (Migugunam, Kuraigunam)	Abdominal discomfort Fever Bloody diarrhoea with mucus Paleness (Anemia) Anorexia
• PITHAM AnalaPitham Ranjagaptham SaathagaPitham		Dizziness or weakness Glossitis with Sour taste of tongue
• KAPHAM Kilethagam Bothagam		

DISCUSSION OF DIFFERENTIAL DIAGNOSIS BETWEEN VANNI PITHAM AND ATHISARA PITHAM

வளி நிணக் கழிச்சல்

நோவாகும் நடுவயிறுப் பசம தாகும்
நுட்பமாம் பசியெடுக்கு முடம்பு லர்த்துந்
தீவீகுஞ் சீதமாய் வயிறு போகும்
சிதறுமே மலந்தானும் வாயு தன்னால்
காவாகுங் கட்டியாய் வயிற்றில் காணுங்
காற்றுமே மிகக்கழியும் கறுப்பு காணுங்
பாவாகுங் பழவெல்லம் போலே வீழும்
படுவாதக் கிராயிடப் பண்பி தாமே

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SIMILARITIES

VANNI PITHAM	VALI NINA KAZHICHAL
கொள்கையாய் பேதமாய் வயிறுளைந்து Abdominal discomfort or Boring pain in abdomen	நோவாகும் நடுவயிறுப் பசம தாகும் Abdominal pain with distension in abdomen
வள்கையாய்ச் சீதமாய்ச் செந்நீர் பாய்ந்து Bloody diarrhoea with passage of mucus	சீதமாய் வயிறு போகும் பழவெல்லம் போலே வீழும் diarrhoea with mucus discharge

Table .9 Differential Diagnosis

DISSIMILARITIES

VANNI PITHAM	VALI NINA KAZHICHAL
வாறான வசனமிகத் தானுஞ் செல்லா Anorexia	நுட்பமாம் பசியெடுக்கு முடம்பு லர்த்துந் Excessive appetite

Table .10 Differential Diagnosis

அதிசாரப் பித்தம்

அரிதான வயிறதனி லிரைச்ச லாகு
மடிவயிறு பிடுங்கியே பேதி யாகும்
உரிதான உப்பசந்தான் மெத்த மாகு
மொளிவிலாப் பக்கத்தில் வலியு மாகும்
எரிவான ஈரலெல்லாங் குமுறல் காணு
மேற்றமாய்த் தாகமொடு மயக்க மாகுஞ்
கரிதான வரோசகமா மசாத்திய மாகுஞ்
சலிக்குமே யதிசாரப் பித்தமாமே

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SIMILARITIES

VANNI PITHAM	ATHISARA PITHAM
கொள்கையாய் பேதமாய் வயிறுளைந்து Abdominal discomfort or Boring pain in abdomen	அரிதான வயிறதனி லிரைச்ச லாகு Abdominal discomfort
மள்கையாய் மயக்கமொடு தியக்கமாகி Giddiness	மேற்றமாய்த் தாகமொடு மயக்க மாகுஞ் Excess thirst with gidiness
வாறான வசனமிகத் தானுஞ் செல்லா Anorexia	கரிதான வரோசகமா மசாத்திய மாகுஞ் Anorexia

Table.11 Differential Diagnosis

DISSIMILARITIES

VANNI PITHAM	VALI NINAK KAZHICHAL
வள்கையாய்ச் சீதமாய்ச் செந்நீர் பாய்ந்து Bloody diarrhoea with passage of mucus	மடிவயிறு பிடுங்கியே பேதி யாகும் Diarrhoea with abdominal pain.

Table.12 Differential Diagnosis

A.HISTOLOGY OF THE LARGE INTESTINE

From the end of the esophagus upto the lower end anal canal the alimentary canal has the form of a fibromuscular tube. The wall of the tube is made up of the following layers.

a) The innermost layer is the**mucus membrane** that is made up of
   1. The lining epithelium
   2. A layer of connective tissue, the **lamina propria**, that supports the epithelium
   3. A thin layer of smooth muscle called the **muscularis mucosae.**

b) The mucous membrane rests on a layer of loose areolar tissue called the **submucosa**.

c) The gut wall derives its main strength and form because of a thick layer of muscle (**muscularisexterna**) that surrounds the submucosa.

d) Covering the muscularisexterna there is a **serous layer** or an **adventitial layer**.

The mucous membrane of the colon shows numerous crescent-shaped folds. There are no villi. The mucosa shows numerous closely arranged tubular glands or crypts similar to those in small intestine. The mucosal surface, and the glands are lined by an epithelium made up predominantly of columnar cells with a striated border. Their main function is to absorb excess water and electrolytes from intestinal contents.

Many columnar cells secrete mucous and antibodies (IgA). The antibodies provide protection against pathologic organisms. Numerous goblet cells are present, their number increasing in proceeding caudally.

The mucus secreted by them serves as a lubricant that facilitates the passage of semisolid contents through the colon. Paneth cells are not present. Some endocrine cells, and some stem cells are seen.

The epithelium overlying solitary lymphatic follicles (present in the lamina propria) contains M-cells similar to these described in the small intestine. Scattered cells bearing tufts of long microvilli are also seen. They are probably sensory cells.

The submucosa often contains fat cells. Some ells that contain PAS-positive granules, termed **muciphages**, are also present. These are most numerous in rectum.

The longitudinal layer of muscle is unusual. Most of the fibres in it are collected to form three thick bands, the **taenia coli**. A thin layer of longitudinal fibres is present in the interval between the taenia. The taenia are shorter in length than other layers of the wall of the colon. This results in the production of **sacculations** (also called **haustrations**) on the wall of the colon.

The serous layer is missing over the posterior aspect of the ascending and descending colon, in many situations the peritoneum forms small pouch-like processes that are filled with fat. These yellow masses are called the **appendices epiploicae.**

THE RECTUM

The structure of the rectum is similar to that of the colon except for the following.

1. A continuous coat of longitudinal muscle is present. There is no taenia.
2. Peritoneum covers the front and sides upper one-third of the rectum; and only the front of the middle third. The rest of the rectum is devoid of a serous covering.
3. There are no appendices epiploicae.

THE ANAL CANAL

The anal canal is about 4 cm long. The upper 3 cm are lined by mucous membrane, and the lower 1 cm by skin. The area lined by mucus membrane can be further divided into an upper part (15mm)and a lower part(15mm).

The mucous membrane of the upper 15 mm of the canal is lined by columnar epithelium. The mucous membrane of this part shows six to twelve longitudinal folds that are called the **anal columns.**

The lower ends of the anal columns are united to each other by short transverse folds called the **anal valves**. The anal valves together form a transverse line that runs all around the anal canal. This is **pectinate line**.

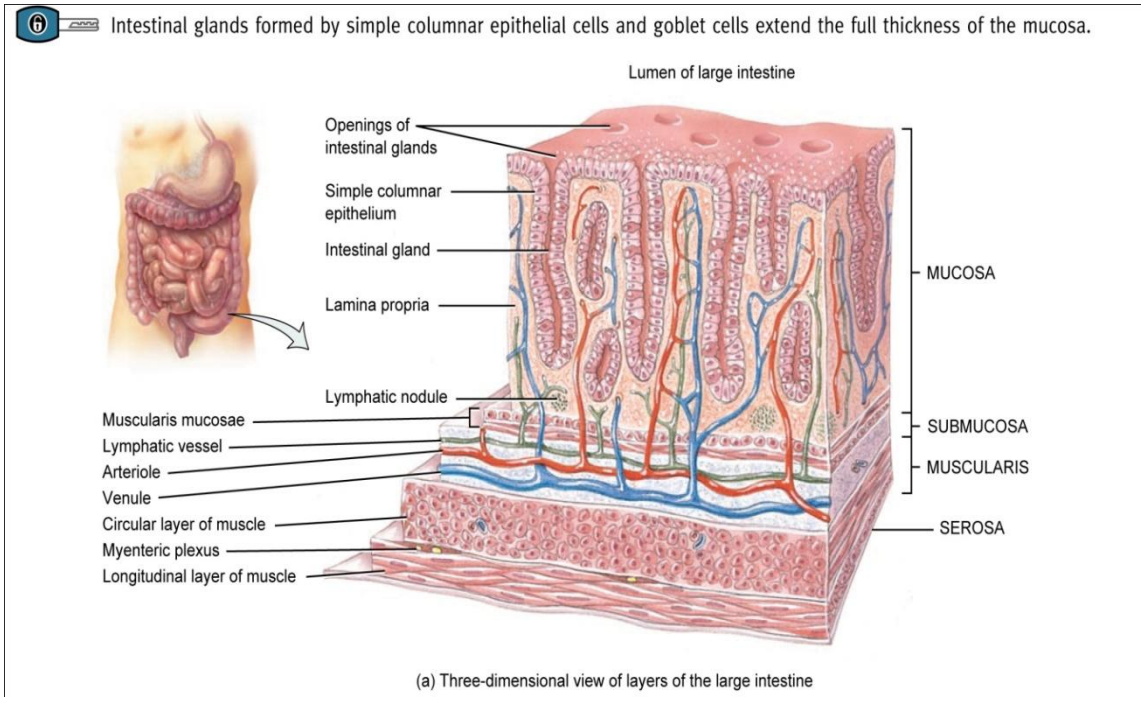
The mucus membrane of the next 15 mm of the rectum is lined by non keratinized stratified squamous epithelium. This region does not have anal columns. The mucosa has a bluish appearance because of the presence ofa dense venous plexus

between it and the muscle coat. This region is called the **pectin** or **transitional zone**. The lower limit of the pectinform the **white line(of Hilton).**

The lowest 8 to 10 mm of the anal canal are lined by true skin in which hair follicles , sebaceous glands are present. Above each anal valve there is a depression called the anal sinus. They are called the **anal (or circumanal) glands**.

The anal canal is surrounded by circular and longitudinal layers of muscle continuous with those of the rectum. The circular muscle is thickened to form the **internal anal sphincter.** Outside the layer of smooth muscle, there is the **external anal sphincter** that is made up of striated muscle.

Prominent venous plexuses are present in the submucosa of the anal canal. The internal haemorrhoidal plexus lies above the level of the pectinate line while the external haemorrhoidal plexus lies near the lower end of the canal.



(a) Three-dimensional view of layers of the large intestine

ANATOMY OF LARGE INTESTINE

The large intestine extends from the distal end of the ileum to the anus and 1.5 m long.

Its calibre is greatest near the caecum and gradually diminishes to the level of mid rectum. It enlarges in the lower third of the rectum to from the rectal ampulla above the anal canal. The large intestine differ from the small intestine in that it has a greater calibre it is for the most part more fixed in position.

Its longitudinal muscles, though a complete layer is concentrated into three longitudinal bands, small adipose projection, appendices epiploicae, are scattered over the free surface of the whole colon. Moreover the colonic wall is puckered into sacculations which may in part, be due to the presence of the taenia coli, and which may be demonstrated on plain radiographs as incomplete septations arising from the bowel wall. The function of the large intestine is chiefly absorption of fluids and solutes.

It is divided into

- Caecum
- Ascending colon
- Transverse colon
- Descending colon
- Sigmoid colon
- Rectum
- Anal canal

In the angle between caecum and the terminal part of the ileum there is a narrow diverticulum called the vermiform appendix.

The structure of the large intestine is adapted for storage of matter reaching it fom the small intestine, and for absorption of fluid and solutes fromit.

The epithelium is absorptive (columnar) but villi are absent. Adequate lubrication for passage of its contents is provided by numerous goblet cells scattered in the crypts as well as on the surface of the mucous membrane. The presence of numerous solitary lymphaic follicle provides protection against bacteria present in the lumen of the intestine. It enlarges in the lower third of the rectum to from the rectal ampulla above the anal canal.

CAECUM:

Caecum is a large blind pouch of large intestine lying in the right iliac fossa below the ileocaecal valve and continuing distally as the ascending colon. The blind ending vermiform appendix usually arises on its medical side at the level of ileal opening. Its average axial length is 6 cm and its breadth is 7.5 cm.

It rests posteriorly on the right ilacus and psoas major, with the cutaneous nerve of thigh interposed. Posteriorly lies the retrocaecal recess which frequently contains the vermiform appendix.

The anterior abdominal wall is immediately anterior to the caecum except when it is empty, when the greater omentum and some loops of the small intestine may be interposed.

Usually the caecum entirely covered by peritoneum, but occasionally this is incomplete posterosuperiorly where it lies attached to the iliac fascia by loose connective tissue.

In early fetal life the caecum is usually short, conical and broad at the base, with an apex turned superomedially towards the ileocaecal junction. The caecum commences the process of fluid and electrolytes reabsorption, which occurs to a large extent in the ascending and transverse colon.

ASCENDING COLON

The ascending colon is 15 cm long and narrower than the caecum.

It ascends to the inferior surface of the right lobe of the liver, on which it makes a shallow depression, and then turns abruptly forwards and to the left, at the hepatic flexture.

It is a retroperitoneal structure covered anteriorly and on both sides by peritoneum.

The posterior surface is connected by loose connective tissue to the iliac fascia, the iliolumbar ligament, the quadratuslumborum muscles, the aponeurosis of transversusabdominis, and the anterior peri-renal fascia inferolateral to the right kidney.

The lateral femoral cutaneous nerve, usually the fourth lumbar artery, and sometimes the ilioinguinalansdiliohypogastric nerves lie posteriorly as they cross the quadrates lumborum muscles, Laterally the peritioneum forms the paracolic gutter.

The ascending colon possesses a narrow mesocolon for part of its course in up to one-third of cases. Anteriorly it is in contact with loops of ileum, the greater omentum and the anterior abdominal wall.

TRANSVERSE COLON

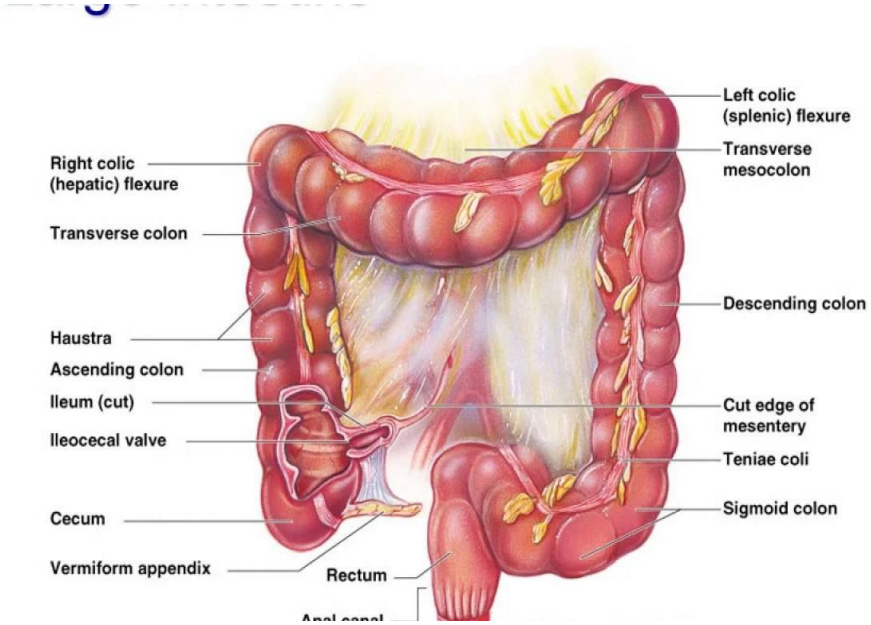
The transverse colon is 50 cms long and extends fro the hepatic flexure in the right lumbar region across into the left hypochondriac region, where it curves posteroinferiorly below the spleen as the splenic flexure.

It is highly variable in length and position, as may be confirmed by radiological assessment, but it often describes an inverted arch, with its concavity directed posteriorly and superiorly.

Near the splenic flexure an abrupt U-shaped curve may descend lower than the main arch. The posterior surface at the hepatic flexure is devoid of peritoneum and is attached by loose connective tissue to the front of the descending part of the duodenum and the head of the pancreas.

The transverse colon from here to the splenic flexure is almost completely invested by peritoneum, and is suspended from the anterior border of the body of the pancreas by the transverse mesocolon.

The latter is attached from the inferior part of the right kidney across the second part of the duodenum and pancreas to the inferior pole of the left kidney. The transverse colon hangs down between the flexures to a variable and sometimes reaches the pelvis.



DESCENDING COLON

The descending colon is 25 cm long. It descends through the left hypochondriac and lumbar regions, initially following the lateral border of the lower pole of the left kidney and then descending in the angle between psoas major and quadratuslumborum to the iliac crest.

It then curves inferomedially, lying anterior to iliacus and psoas major, to become the sigmoid colon at the inlet of the lesser pelvis. It is a retro-peritoneal structure covered anteriorly and on both sides by peritoneum.

The osterior surface is separated by loose connective tissue from the anterior perineal fascia inferolateral to the left kidney, the aponeurosis of transversusabdominis, quadratuslumborum, iliacus and psoas major. The subcostal vessels and nerves, iliohypogastric and ilioinguinalnervs, fourth lumbar artery(usually), the lateral femoral cutaneous, femoral and genitofemoral nerves, the gonadal vessels and the external iliac artery all pass behind the descending colon.

Loops of jejunum lie anteriorly, if the anterior abdominal walls are relaxed, the most inferior part of the descending colon maye directly palpated trans abdominally.

The descending colon is smaller in calibre more deeply placed, and more frequently covered posteriorly by peritoneum, than the ascending colon.

SIGMOID COLON

The sigmoid colon begins at the pelvic inlet and ends at the rectum. Characteristically it forms a mobile loop which normall lies in the lesser pelvis.

It is completely invested in peritoneum and is attached to the posterior pelvic wall and lower posterior abdominal wall by the fan-shaped sigmoid mesocolon. The root of the sigmoid mesocolon has an inverted "V" attachment to the posterior abdominal wall.

The sigmoid colon nitially descends djacent to the left pelvic wall, but then comes to lie in an extremely variable position. It may remain folded principally in contact with the peritoneum overlying iliacus, or it may cross the pelvic cavity between the rectum and bladder in males, or the rectum and uterus in females, and it may even reach the right pelvic wall.

If long, the sigmoid loop may rise out of the pelvis into the abdominal cavity and lie in contact with loops of ileum. The sigmoid loop ends in a relatively constant position lying just to the left of the midline at the level of the third sacral body, where it bends inferiorly and is continuous with the rectum. The sigmoid loop is fixed at its junctions with the descending colon and rectum but quite mobile between them.

VERMIFORM APPENDIX

The vermiform appendix is a narrow vermian (worm shaped) tube which arises from the posteomedialcaecal wall, 2 cm below the end of the ileum.

It may occupy one of several positions. Thus it may be retrocaecal, retrocolic (behind the caecum or lower ascending colon respectively) pelvic or descending (when

it hangs dependently over the pelvic brim, in close relation to the right uterine tube and ovary in females). These are the commonest positions seen in clinical practice.

Other positions or occasionally seen especially when there is a long appendix mesentry allowing greater mobility. These include subcaecal (below the caecum), preilial (anterior to the terminal ileum), postileal (behind the terminal ileum).

RECTUM

The rectum is continuous with the sigmoid colon at the level of the third sacral vertebra and terminates at the upper end of the anal canal.

It descends along the sacrococcygeal concavity as the sacral flexure of the rectum, initially inferoposteriorly and then inferoanteriorly to join the anal canal by passing through the pelvic diaphragm.

The anorectal junction is 2-3 cm in front of and slightly from the lower end of the rctum the posterior bend is termed the perineal flexure of the rectum and the angle it forms with upper anal canal is termed the anorectal angle.

The upper is convex to the right,

The middle (the most prominent) bulges to the left and

The lower is convex to the right.

Both ends of the rectum are in the middle plane. These features suit its specialized role in defecation and continence in combination with the anal canal.

ANAL CANAL

The anal canal begins at the anorectal junction and ends at the anal verge. It is angulated in relation to the rectum because the pull of the sling-like puborectalis produces the anorectal angle.

It lies 2-3 cm in front of and slightly below the tip of the coccyx, which is opposite to the apex of the prostate in males.

The anal verge is marked by a sharp turn where the squamous epithelium which lines the lower anal canal becomes continuous with the skin of perineum.

The pigmentation of skin around the anal verge demarcates the extent of the external sphincter. Identification of the anal verge may be difficult, particularly in males in whom the perineum may ‘funnel’ upwards into the lower anal canal. However, the characteristic puckering of the external epithelium caused by penetrating fibres of the conjoint longitudinal layer makes a useful landmark.

The functional anal canal represented by a zone of high pressure which roughly equates to the anatomical canal. The anal canal consists of an inner epithelial lining, avascular subepithelium, the internal and external sphincters and fibromuscular supporting tissue.

It is between 2.5 and 5 cm long in adults although the anterior wall is slightly shorter than the posterior. It is usually shorter in females. At rest it forms an oval slit in the anteroposterior plane rather than a circular canal due to the arrangement of the external anal sphincter.

PHYSIOLOGY

The ingested food items are passed along the entire length of the GI tract. The passage of ingesta is due to the motility of the GI tract.

The motility of the GI tract propels food from the oral end to the aboral end. This is done in such a manner that the digestion and absorption of the ingesta can take place in the different compartments of the digestive tract.

The movements of the GI tract bring about proper mixing the food with enzymes of the digestive juices and facilitate the process of absorption. The motility of the colon slowed down to permit its absorptive function.

The motor activity at the two ends of the digestive tract, the mouth and anus, are under voluntary control. The rest of the GI tract contain smooth muscle and are not under voluntary control.

GASTROINTESTINAL HORMONES

The gastrointestinal tract is the largest endocrine organ in the body.

The first ormone, secretin was isolated from the intestinal mucosa. The GI mucasa contains hormone-secreting cells scattered along the entire length of the digestive tract. These cells secrete peptides and/or amides that have an important role in the digestive function of the GI tract.

These peptides and amines are also present in the brain where they function as neuro hormones and neurotransmitters.

Endocrine cells of the tract

G-cells in gastric antrum and duodenum.

A,B,D and F-cells of the islets of Langerhans.

I-cells in the duodenum and jejunum.

K-cells in the duodenum and jejunum.

EC-cells of many subtypes.

Functional characteristics of GI hormones

A large number of hormones are synthesized and secreted by the endocrine cells of the GI tract. These hormones show common functional characteristics.

They are peptides and amines.

They have homologous structures and can be classified into:

(a) Gastrin family and

(b) Secretin family.

They have paracrine actions and some of these have endocrine functions.

The important gastrointestinal hormones are

Gastrin

Cholecystokinin-Pancreozymin or CCK

Secretin

Gastric inhibitory peptide GIP

Motilin

Gastrin

- Gastrin is a peptide synthesized and secreted by the G-cells present in the antral gastric mucosa and the duodenum.
- The physiologically important forms of Gastrin are called **little gastrin**(G17)

Actions

G17 is the principal form of gastrin. Gastrin stimulates gastric acid secretion, pepsin secretion and stimulates gastric motility. Products of protein digestion act directly on the G-cells and cause gastrin secretion.

Regulation

- Gastrin secretion is affected by the contents of the stomach, vagus and systemic factors.
- Vagus stimulates gastrin secretion and this acts as a negative feedback mechanism to regulate gastrin secretion. Acid in the stomach initially stimulates gastrin secretion, but when the acidity increases above an optimal level, it inhibits gastrin secretion.
- Epinephrine stimulates gastrin secretion.
- Other hormones like secretin, glucagon and GIP inhibit gastrin secretion.

Cholecystokinin-Pancreozymin (CCK-PZ)

CCK-PZ is a single hormone secreted by the I-cells in the upper parts of the intestine. It is more commonly referred to as cholecystokin and denoted by CCK.

Actions

CCK causes contration of the gall bladder.

- It enhances secretion of pancreatic juice rich in enzymes.
- It inhibits gastric emptying but increases intestinal motility.
- CCK potentiates the actions of secretin.

Regulation

Products of protein and fat digestion stimulate secretion of CCK. Aromatic amino acids and fatty acids are the most potent stimulants. The digestion products of protein and fat regulate the secretion of CCK by positive fed back mechanism.

Secretin

Secretin was the first hormone to be demonstrated and identified.

Actions

- Secretin acts on the duct cells of the pancreas and the biliary tract and increases the secretion of a bicarbonate-rich alkaline aquous pancreatic juice.
- It potentiates the action of CCK on pancreatic secretion.
- Secretion inhibits gastric acid secretion .

Regulation

Presence of digestion of protein in the intestinal lumen, and acidic luminal contents stimulate the secretion of secretin. The effect of acidity on secretin secretion helps to neutralize the acid chime by a feedback mechanism.

Gastric inhibitory peptide (GIP)

GIP is secreted by K-cells of the duodenum and jejunum.

Actions

- Initially, GIP was thought to inhibit gastric secretion and motility and hence the name. This effect is not seen in physiological doses.
- GIP along with gastrin, CCK and secretin focillitates digestion and absorption of foodstuffs.
- GIP stimulates secretion of insulin and helps in the metabolism of absorbed nutrients.

Motilin

Motilin is secreted by the EC-cells in the duodenal mucosa

Actions

Motilin enhances intestinal motility and regulates interdigestive motility (MMC) of GI tract.

GASTROINTESTINAL MOTILITY

1. Mastication (chewing)
2. Deglutition (swallowing)
3. Gastric motility
4. Movement of the small intestine
5. Activity of the ileocaecal valve and sphincter
6. Colonic motility
7. Defaecation

1. Mastication

Mastication or chewing is a voluntary act. Mastication breaks up the food items in the oral cavity int smaller portions. In the process, the food items get mixed with saliva.

The soluble components in the food items dissolve in saliva and give rise to taste sensation. Even though large sized food items can be swallowed, they give rise to painful contractions of the oesophagus. Hence mastication is necessary.

Mastication is a coordinated muscular activity. It is brought about by the combined contractions of the muscles of the jaw and the tongue. The chewed food mixed with saliva, forms a bolus, which can be easily swallowed.

2. Deglutition

Swallowing follows mastication. It is initiated voluntarily and continued as a reflex act. The receptors are the tactile receptors in the oral cavity. The sensory impulses are integrated in the swallowing center in the medulla and the pons. The efferent fibres are carried in the seventh, ninth and twelfth cranial nerves.

3. Gastric motility

The motility of the gastric musculature enables the stomach to fulfill its threefold functions.

1. Reservoir of food
2. Conversion of solid food into liquid chyme
3. Emptying of the gastric centre contents into the duodenum.

Reservoir of food

The fundus of the stomach functions as a reservoir of food. The fundus shows only changes in the tone of the muscle and does not exhibit intermittent contractions. As the food enters the stomach, the muscle fibres of thefundus increase in length to accommodate the food. This occurs without any increase in intra gastric pressure. This is known as receptive relaxation.

Conversion of solid food into liquid chyme

Presence of fiood in the stomach initiates waves of contraction in the body of the stomach. These occur at a rate of 3 to 4/min. These constrict the wall of the stomach and narrow the lumen as they progress towards the antrum.

These waves of contraction obliterate the lumen and press the food items against the pylorus. The contractions become forceful as digestion progresses. The contractions are more pronounced in the distal half of the stomach. The solid food particles are broken down, mix with gastric secretions and form semiliquid chyme.

Gastric emptying

The gastric contents enter the duodenum at a controlled rate. In gastric emptying the antrum, the pylorus and the upper duodenum function as a unit. Contraction of the antrum is followed sequentially by contractions of the pylorus and the duodenum. The pyloric opening regulates the rate of emptying, permitting only smaller particles from entering the duodenum.

4. Movements of Small Intestine

The movements of the small intestine subserve two important functions

The movements mix chyme with the digestive juices and expose the chyme to maximum possible surface area for absorption.

The movements are regulated in such a manner that the digesta move along the small intestine to ensure adequate absorption.

The small intestine exhibits three patterns of motility:

1. Segmentation
2. Peristalsis
3. Migrating motor complex (MMC)

5. Ileocaecal valve and sphincter

The ileocaecal valve prevents the backflow of colonic contents into the small intestine. The valve protrudes into the lumen of the caecum. It closes when the pressure in the caecum becomes exclusive.

The wall of the ileum immediately adjoining the ileocaecal valve has a thickened ileocaecal sphincter. Normally the sphincter is closed. Peristalsis in the part of the ileum causes relaxation of the sphincter and permits entry of a small amount of chyme into the caecum.

Distension of the ileum reflexly relaxes the sphincter. Distension of caecum reflexly contracts the sphincter. The ileocaecal sphincter regulates the entry of chyme into the caecum in a manner that facilitates colonic absorption of water and electrolytes. The sphincter activity is controlled by the intraluminal plexuses.

6. Colonic motility

The colon has the larger diameter than the intestine and accommodates the undigested residues. The proximal parts are concerned with absorption and the distal parts store the undigested faecal matter.

In general, the motility of the colon is very sluggish. The sigmoid colon has higher tone and shows phasic motor activity. This slows down the movements in the descending colon and permits retention of maternal in the proximal colon for nearly 36 hours. Two types of motor activity are seen in the colon-segmentation and peristalsis.

The segmentation involves the circular muscles and since the longitudinal muscle is present in bands (taenia coli), this gives rise to haustrations.

The peristaltic type of contraction propels the contents of the colon. After ingestion of a meal, or before defaecation, peristaltic contractions occur over large segments and the colon becomes narrower and shorter. This is called mass peristalsis or movement.

7. Defaecation

The act of defaecation involves the rectum and the anal canal. The rectum is continuation of the sigmoid colon and leads into the anal canal. The anal canal is about 3cms long,is lined by squamous epithelium and has a rich sensory innervation.

The internal and external sphincters are present in the proximal and distal parts of the anal canal respectively. The internal spincter is made of smooth muscle and receive

innervation from the enteric plexuses and the autonomic nerves. Theexternal sphincter is under voluntary control.

The rectum is normally empty of faecal matter, but the rest of the colon contains faecal matter. Containment of faecal matter is due to the tonic contration of the sphincters and the acute angulation between the rectum and the anal canal.

The act of dafaecation is under voluntary control. It involves noth reflex and voluntary components. The integrating centre for defaecation is located in the sacral spinal cord and is under the control of higher centres in the brain. The pelvic sacral nerves are the major efferent pathways. Filling of the rectum with faeces stimulate the receptors in the rectum and pelvic floor, and the urge to defaecate arise. This results in the relaxation of the external sphincter and the puborectal muscle. Evacuation is assisted by a rise in the intra-abdominal pressure. The anorectal angle becomes straight and the contractions of the abdominal muscles help force the throughthe relaxed spincters.

Neural control of Gastrointestinal motility

The intrinsic activity of the smooth is regulated by the nervous system. The nerve fibres innervating the gut wall, course for long distances between the muscle cells and contain several swellings known as varicosities.

These varicosities contain transmitters, which are released into the interstitial fluid bathing the muscle cells.

Electrical coupling between bundles of muscle cells produce coordinated contraction of a region of the gut wall.

The nervous control of the gastrointestinal motility is brought about by the concentrated activity of the central nervous system, vagus and splanchnic nerves.

The intrinsic nerve plexuses in the gut wall constitute the enteric nervous system. This system of complicated network of ganglion cells, interneurons, sensory and motor neurons mediate the peristaltic type of movement seen in the alimentary tract. These movements transport thefood along the digestive tract.

The prevertebral ganglia modify the activity of separate and distinct areas of the gut. They receive information from the gut and the central nervous system, and mediate a number of visceral responses and reflexes.

The vagus provides parasympathetic innervation upto the transverse coon and the remainder by the pelvic sacral nerves. Nearly 90% of the fibres in the vgus are sensory and convey information from the mucosa and the muscle fibres. The vagal motor effects

may be excitatory or inhibitory. Vagal fibres may excite one group of muscles but another group.

The sympathetic innervation of the GI tract is from the pre vertebral and paravertebral ganglia via the splanchnic nerves. The sympathetic fibres modify the activity of the gut. The sympathetic fibres have both sensory and moto functions. They serve to integrate information from other organs and reduce coordinated responses in different parts of the digestive tract.

The parasympathetic fibres are cholinergic and the sympathetic fibres are adrenergic. In addition, there are present non-cholinergic inhibitory neurons, which release VIP or ATP.

Large intestine motility

Segmental movements help in absorption H2O and salts. Frequency is 1-2/min and big haustrations are formed. Small intestinal segmental movements are different from large intestine in their regularity and haustrations in large intestine at a given time.

In the colon, peristaltic movement is known as mass movement, lasting for 3 min, causing colonic content, to be propelled towards sigmoid colon. These contractions occur 3-4 times/day generally after meals and are induced by gastrocolic reflex. If there is gastric distension due to food, it increases peristaltic activity. Most of the food reaches caecum within 4-5 hours after eating, and it takes another 8-14 hours to reach sigmoid colon.

Secretions of Large Intestine

Mucous being the chef secretion , helps to lubricate the faecal matter, is alkaline (PH 8-10) n nature. Bacteria in the colon cause production of gases like CO2, H2S and CH4 (methane). The flatus passed consists of N2 swallowed from the air during deglutition. Secretions are increased by tactile stimulation of mucosa, physiologically extrinsic innervation in colonic secretion is not very significant, but in diarrhea and other diseases and parasympathetic activity causes increased mucous secretions as well as motility.

Composition of Large Intestinal Juice

The large intestinal juice contains 99.5% of water and 0.5% os solids. Digestive enzymes are absent in large intestinal secretion. The concentration of bicarbonate is high in large intestinal juice.

Functions of Large Intestinal Juice

Neutralization of Acids

Strong acids formed by bacterial action in large intestine are neutralized by the alkaline nature of large intestinal juice. The alkalinity of this juice is mainly due to the presence of large quantity of bicarbonate.

Lubrication Activity

The mucin present in secretion of large intestine lubricates the mucosa of large intestine and the bowel contents, so that the movement of bowel is facilitated. The mucin also protects the mucous membrane of large intestine by preventing the damage caused by mechanical injury or chemical substances.

Functions of Large Intestine

1. **Absorption**

Water and electrolytes are mainly absorbed in the proximal half of colon. Na+, and Cl- and H2O are also absorbed, but fatty acids, calcium ions and amino acids are not absorbed.

Vitamin K and B complex are synthesized by normal colonic bacteria and are absorbed in large intestine.

Antibiotics take during various injections kill these harmless, but useful bacteria and that is why, the body need for vitamin B complex is increased and the vitamin B complex is prescribed, when broad spectrum antibiotics are used.

2. **Storage**

Faeces are stored until expelled by daefaecation.

3. **Formation of Faeces**

After the absorption of nutrients, water and other substances, the unwanted substances in the large intestine form faeces. This is excreted out.

4. **Excretory Function**

Large intestine excretes heavy metals like mercury, lead, bismuth and arsenic through faeces.

5. **Secretory Function**

Large intestine secretes mucin and inorganic substances like chlorides and bicorbonates.

6. Synthetic Function

The bacteria flora of large intestine synthesizes folic acid, vitamin B12 and vitamin K. By this function large intestine contributes in erythropoietic activity and blood clotting mechanism.

INFLAMMATORY BOWEL DISEASE

Epidemiology

Ulcerative colitis and Crohn's disease are chronic inflammatory bowel diseases that pursue a protracted relapsing and remitting course, usually extending over years. The diseases have many similarities and it is sometimes impossible to differentiate between them. One crucial distinction is that ulcerative colitis involves only the colon, while Crohn's disease can involve any part of the gastrointestinal tract from mouth to anus. The incidence of inflammatory bowel disease (IBD) varies widely between populations. There was a dramatic increase in the incidence of both ulcerative colitis and Crohn's disease in the Western world, starting in the second half of the last century andcoinciding with the introduction of a more 'hygienic' environment with the advent of domestic refrigeration and the widespread use of antibiotics. The developing world has seen similar patterns, as these countries adopt an increasingly Westernised lifestyle.

In the West, the incidence of ulcerative colitis is stable at 10–20 per 100 000, with a prevalence of 100–200 per 100 000, while the incidence of Crohn's disease is increasing and is now 5–10 per 100 000, with a prevalence of 50–100 per 100 000. Both diseases most commonly start in the second and third decades of life, with a second smaller incidence peak in the seventh decade. Approximately 240 000 people are affected by IBD in the UK (approximately 1.4 million in the USA), equating to a prevalence of about 1 in 250. Life expectancy in patients with IBD is similar to that of the general population. Although many patients require surgery and admission to hospital for other reasons, with substantial associated morbidity, the majority have an excellent work record and pursue a normal life.

Aetiology

The cause of the disease remains unknown. The main hypotheses that have been proposed include infection, allergy to dietary components, immune responses to bacterial or self-antigens, an abnormality in epithelial cell integrity, and the psychosomatic theory. There are virtually no data to support a primary role for psychosomatic factors in the aetiology of the disease, although they may play a secondary role in determining the pattern of symptoms and must always be considered when managing individual patients.

Infection

No specific infective organism has been consistently isolated from patients with ulcerative colitis. However, the recognition that the strains of Escherichia coli in the

normal colon are continually changing has led to the concept that patients may carry strains which, by releasing enzymes or other toxic products, might damage the mucosa. The demonstration that, even in remission, patients with ulcerative colitis are more likely to harbour E. coli expressing adhesins than control subjects is a particularly interesting observation, as these may allow the bacteria to adhere readily to the epithelium. The role of sulphate-reducing bacteria is also of interest as these organisms are found more commonly in those with colitis. They reduce sulphate to sulphide which, in turn, inhibits butyrate oxidation in epithelial cells. Several investigators have demonstrated reduced activity of butyrate dehydrogenase within colitic epithelium, even in remission, raising the possibility that luminal bacteria may have a deleterious effect on epithelial cell metabolism and, hence, integrity.

Food allergy

The early suggestions of allergic responses to milk proteins, eggs, and other dietary proteins have not been substantiated as an aetiological factor. Milk-free diets may be beneficial in a minority of patients but it is not clear whether this results from an associated hypolactasia, an immunological response, or some other mechanism. The failure of ulcerative colitis to respond either to intravenous nutrition avoiding oral food or to colonic isolation by means of a split ileostomy are further pointers that dietary factors play little part.

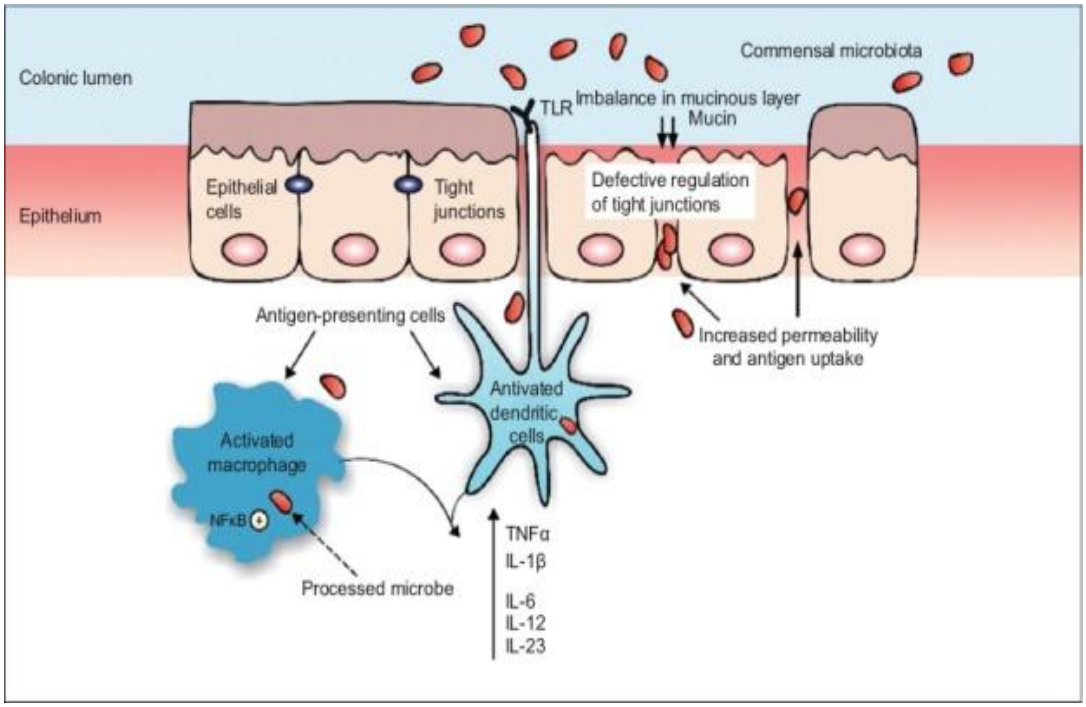
Environmental factors

As well as infection and diet, smoking and the use of oral contraceptives may influence disease. Many studies have now shown that ulcerative colitis is more common in non-smokers than smokers, with a relative risk of 2 to 6. Ex-smokers have a particularly high incidence and this is highest for former heavy compared with light smokers. Women taking oral contraceptives may have a slightly increased risk of the disease but this association is weak and loses significance when the data are corrected for smoking habits and social class.

Pathophysiology

IBD has both environmental and genetic components, and evidence from genome-wide association studies suggests that genetic variants that predispose to Crohn’s disease may have undergone positive selection by protecting against infectious diseases, including tuberculosis. It is thought that IBD develops because these genetically susceptible individuals mount an abnormal inflammatory response to

environmental triggers, such as intestinal bacteria. This leads to inflammation of the intestine with involvement of a wide array of innate and adaptive immune cell responses, with release of inflammatory mediators, including TNF-α, IL-12 and IL-23, which cause tissue damage. There is an association between microbial dysbiosis and IBD. For example, there is a reduced diversity, primarily of Firmicutes and in particular, Faecalibacteriumprausnitzii. Functional changes in the bacteria are important and include a reduction of anti-inflammatory metabolites, such asbutyrate and other short-chain fatty acids. There is emerging evidence that the virome and mycobiome (fungal species) may be important in the development of IBD. In both diseases, the intestinal wall is infiltrated with acute and chronic inflammatory cells, but there are important differences between the conditions in the distribution of lesions and in histological features. .



Ulcerative colitis

Inflammation invariably involves the rectum (proctitis) and spreads proximally in a continuous manner to involve the entire colon in some cases (pancolitis). In long-standing pancolitis, the bowel can become shortened and post-inflammatory ‘pseudopolyps’ develop; these are normal or hypertrophied residual mucosa within areas of atrophy. The inflammatory process is limited to the mucosa and spares the deeper layers of the bowel wall. Both acute and chronic inflammatory cells infiltrate the lamina propria and the crypts (‘cryptitis’). Crypt abscesses are typical. Goblet cells lose their

mucus and, in long-standingcases, glands become distorted. Dysplasia,characterised by heaping of cells within crypts, nuclear atypia and increased mitotic rate, may herald the development of colon cancer.

Crohn's disease

The sites most commonly involved are, in order of frequency, the terminal ileum and right side of colon, colon alone, terminal ileum alone, ileum and jejunum. The entire wall of the bowel is oedematous and thickened, and there are deep ulcers that often appear as linear fissures; thus the mucosa between them is described as 'cobblestone'. These may penetrate through the bowel wall to initiate abscesses or fistulae involving the bowel, bladder, uterus, vagina and skin of the perineum. The mesenteric lymph nodes are enlarged and the mesentery is thickened. Crohn's disease has a patchy distribution and the inflammatory process is interrupted by islands of normal mucosa. On histological examination, the bowel wall is thickened with a chronic inflammatory infiltrate throughout all layers.

Clinical features

Ulcerative colitis

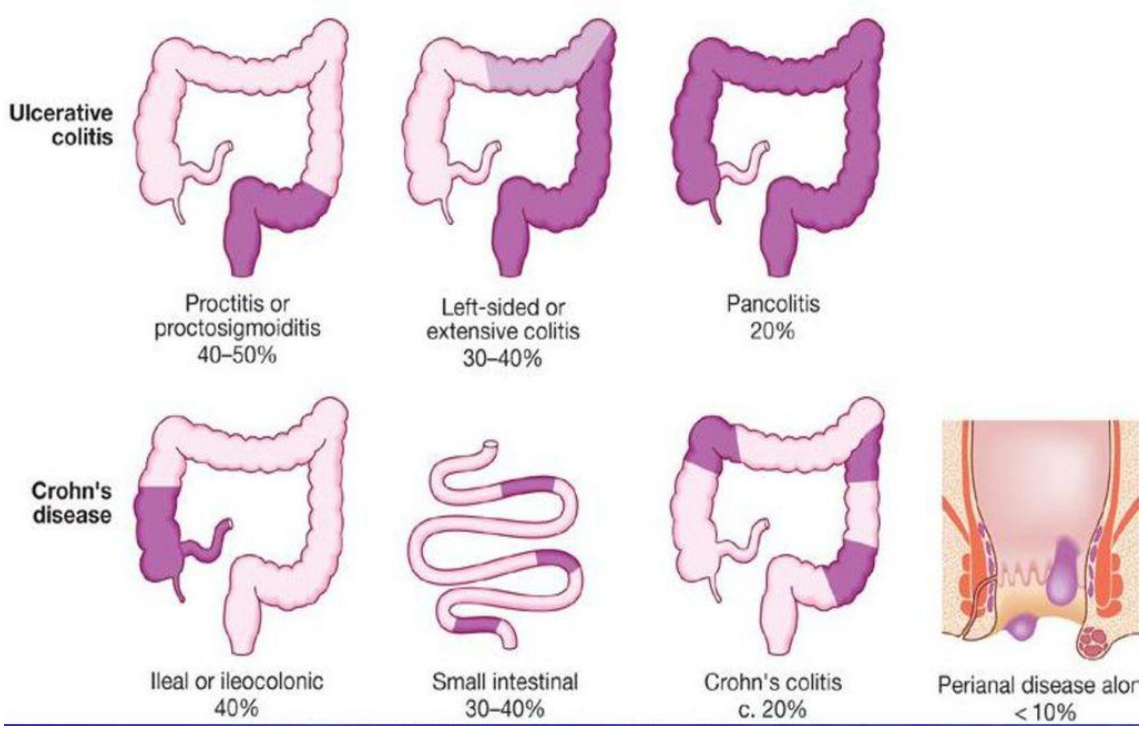
The cardinal symptoms are rectal bleeding with passage of mucus and bloody diarrhoea. The presentation varies, depending on the site and severity of the disease (see Fig. 21.45), as well as the presence of extra-intestinal manifestations. The first attack is usually the most severe and is followed by relapses and remissions. Emotional stress, intercurrent infection, gastroenteritis, antibiotics or NSAID therapy may all provoke a relapse. Proctitis causes rectal bleeding and mucus discharge, accompanied by tenesmus. Some patients pass frequent, small-volume fluid stools, while others pass pellety stools due to constipation upstream of the inflamed rectum. Constitutional symptoms do not occur. Left-sided and extensive colitis causes bloody diarrhoea with mucus, often with abdominal cramps. In severe cases, anorexia, malaise, weight loss and abdominal pain occur and the patient is toxic, with fever, tachycardia and signs of peritoneal inflammation.

Crohn's disease

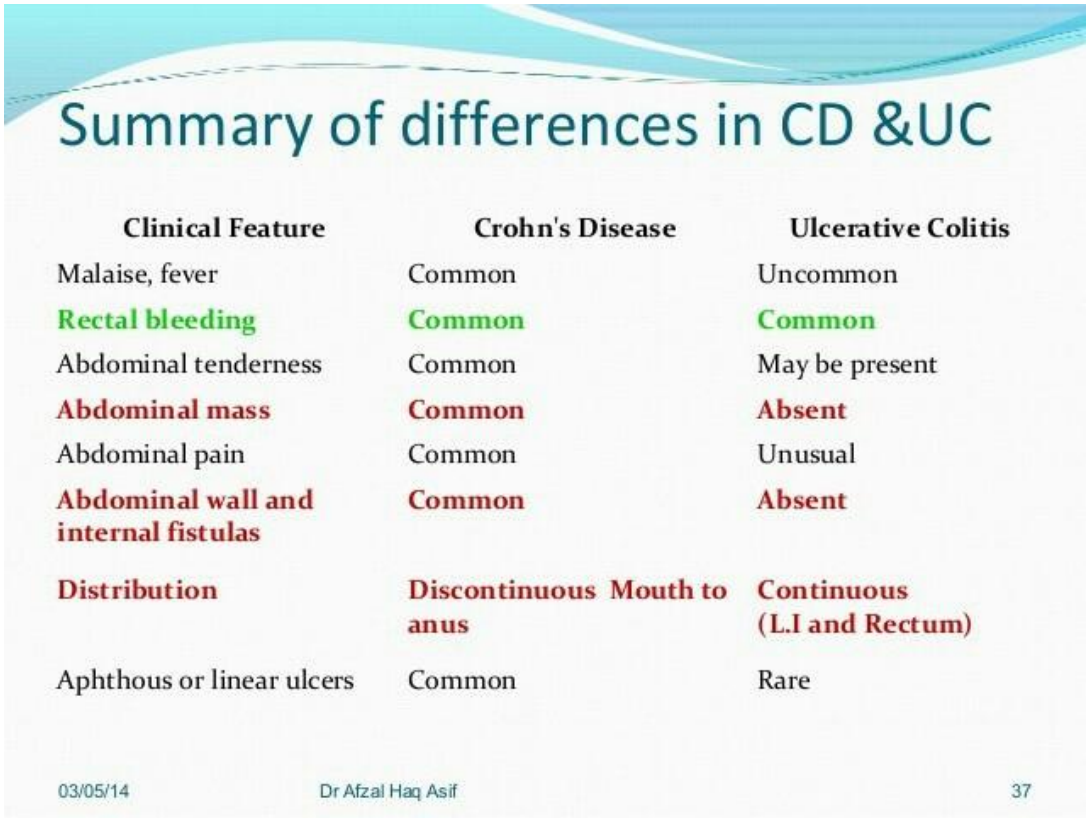
The major symptoms are abdominal pain, diarrhoea and weight loss. Ileal Crohn's disease may cause subacute or even acute intestinal obstruction. The pain is often associated with diarrhoea, which is usually watery and does not contain blood or mucus. Almost all patients lose weight because they avoid food, since eating provokes

pain. Weight loss may also be due to malabsorption and some patients present with features of fat, protein or vitamin deficiencies. Crohn's colitis presents in an identical manner to ulcerative colitis but rectalsparing and the presence of perianal disease are features that favour a diagnosis of Crohn's disease. Many patients present with symptoms of both small bowel and colonic disease. A few patients present with isolated perianal disease, vomiting from jejunal strictures or severe oral ulceration.

Physical examination often reveals evidence of weight loss, anaemia with glossitis and angular stomatitis. There is abdominal tenderness, most marked over the inflamed area. An abdominal mass may be palpable and is due to matted loops of thickened bowel or an intra-abdominal abscess. Perianal skin tags, fissures or fistulae are found in at least 50% of patients.



Common patterns of disease distribution in inflammatory bowel disease.



Differential diagnosis

If the patient has a history of slow onset of symptoms, including blood and mucus, and has diffuse inflammation on sigmoidoscopy, the diagnosis of ulcerative colitis is highly probable. The major differential diagnosis is Crohn's disease (see Chapter 14.10). If clinical, radiological, endoscopic, and histological information is considered together, less than 10 per cent of patients fall into the category of indeterminate colitis. The recently recognized collagenous colitis usually has only a mild inflammation on colonoscopy and is diagnosed on the basis of a thickened subepithelial collagen band (wider than 15 μm) seen in a rectal biopsy specimen. Microscopic or lymphocytic colitis has a normal endoscopic appearance but shows a diffuse infiltration of the lamina propria with lymphocytes and eosinophils on histological examination. Although ischaemic colitis classically occurs around the splenic flexure, it may occur in the rectum, especially in the elderly, and can be diagnosed histologically. Radiation damage to the rectum may occur, especially in men who have had radiotherapy to the prostate.

Rarely, a drug-induced colitis may occur. The drugs that have been implicated include non-steroidal anti-inflammatory drugs, gold, penicillamine, and 5-aminosalicylic acid. The last drug may cause considerable diagnostic confusion in patients who already have ulcerative colitis. An antibiotic history must be taken but a pseudomembranous

colitis secondary to Cl. difficile can occur in the absence of antibiotic usage, especially in the elderly.

For those patients presenting with a much more acute history, infective forms of colitis must be excluded by stool culture. A sudden onset of symptoms, the predominance of abdominal pain, the ingestion of potentially infected food (chicken, shellfish), and evidence of diarrhoeal disease in contacts are obvious pointers to an infection. Sigmoidoscopic appearances are usually very similar to ulcerative colitis but a rectal biopsy can be very useful in distinguishing an infective from a more chronic ulcerative colitis. The presence of a chronic inflammatory infiltrate, architectural disturbances of the glands, and basal lymphoid aggregates favour ulcerative colitis.

The common organisms causing an infective colitis are salmonella, shigella, and campylobacter. Yersinial infections may also cause a colitis and can pursue a chronic course over many months before resolving. Special culture conditions may isolate the organism from stool, but a rising titre of serum antibody is often the more reliable method of identifying the infection. E. coli 0157 is a recognized cause of an acute colitis, especially in institutions, and massive bleeding is often a characteristic feature. Children may develop a haemolyticuraemic syndrome. Diagnosis is difficult because most laboratories are not equipped either to detect this strain of E. coli or to measure specific antibody. For patients who have travelled in endemic areas, amoebic and schistosomal colitis must be considered—stool examination and histological demonstration of amoebas or schistosomal ova in rectal biopsy specimens make the diagnosis.

Other causes of infective colitis can occur in immunosuppressed patients and include cytomegalovirus, herpes simplex, and Mycobacterium aviumintracellulare. Although these organisms are usually associated with fairly characteristic sigmoidoscopic appearances, they can be associated with a more diffuse pattern of inflammation. Other sexually transmitted causes of proctitis (gonorrhoea, chlamydia, lymphogranuloma) do not usually cause diarrhoea and, especially with gonorrhoea, are associated with the passage of watery pus.

Ulcerative colitis also has to be differentiated from irritable bowel syndrome, colonic polyps or carcinoma, diverticular disease, solitary rectal ulcer syndrome, and factitious diarrhoea. Sigmoidoscopy usually clarifies the diagnosis, but if the ulceration of the solitary rectal ulcer syndrome becomes circumferential, this can be mistaken for ulcerative colitis. A biopsy specimen showing strands of smooth muscle radiating up into the lamina propria between the glands is characteristic of the solitary ulcer syndrome.

Diagnosis

The diagnosis is made on the basis of the history, the absence of faecal pathogens, and the endoscopic and histological appearances of the colon.

Stool cultures should be set up for all patients presenting for the first time and, ideally, for all those presenting with a relapse of established disease. Special culture conditions are required for campylobacter, yersinia, gonococci, and Clostridium difficile. The possibility of an infection with E. coli 0157 must also be considered, especially in patients in whom bleeding and abdominal pain are predominant symptoms. An infective colitis with opportunistic organisms in patients with immunodeficiency syndromes has become much more common and has to be remembered in differential diagnosis.

Sigmoidoscopy is safe, even in patients with a severe attack, and not only confirms rectal inflammation but also allows a biopsy specimen to be taken and an assessment of severity to be obtained. Although some centres use colonoscopy in severe attacks, this is rarely necessary for diagnosis, for assessment of severity, or for determining management. It is best avoided in the acute stage. The earliest signs of colitis on sigmoidoscopy are blurring of the vascular pattern associated with hyperaemia and oedema, leading to blunting of the valves of Houston. With increasing severity, the mucosa becomes granular and then friable. With severe inflammation, the mucosa shows spontaneous bleeding and ulceration. These changes begin in the rectum, they are diffuse, and extend proximally to affect a variable length of the colon. Pseudopolyps (inflammatory polyps) often occur in patients with long-standing disease but tend to be in the colon rather than the rectum.

Colonoscopy with multiple biopsies is useful for assessing the extent of disease and is mandatory for patients with a colonic stricture. It is also required for cancer surveillance (see later). Preparation of the colon should follow the normal methods and osmotic purgation is the most satisfactory. However, a more gentle approach is needed if colonoscopy is done in the presence of severe inflammation, but this is rarely indicated.

All patients with a severe attack must have a plain abdominal radiograph. Not only does this exclude a dilated colon but it may provide prognostic information (mucosal islands, distended small bowel loops) and demonstrate the extent of the disease. An abnormal haustral pattern, thickening of the bowel wall, and mucosal oedema can be detected on a plain film. As an inflamed colon does not hold faecal material, the presence of faecal matter in the ascending or transverse colon will indicate that the inflammation is distal. In a severe attack, barium radiography is virtually never

indicated, but if it is done, a single-contrast study in an unprepared colon with barium entering the colon at low pressure should be used. In less severe disease, a double-contrast barium enema can be safely given, but the colon must not be overdistended and the procedure must be stopped if the patient complains of pain.

Biopsy specimens must be taken at sigmoidoscopy or colonoscopy, preferably with small, cupped forceps. Histological assessment contributes to grading severity as well as the differential diagnosis.

Sigmoidoscopic view of moderately active ulcerative colitis.

Laboratory data

These are required for assessing severity, as discussed above, and to document haematological or biochemical complications.

Iron deficiency is common as a result of chronic iron loss; this can be exacerbated by a severe attack, in which 0.5 g of elemental iron can be lost. Thus, a hypochromic, microcytic anaemia is frequently present. A neutrophil leucocytosis, thrombocytosis, eosinophilia, or monocytosis may also be present and are indicators of active inflammation.

Biochemical abnormalities are rare in mild or moderate attacks, but hypokalaemia, hypoalbuminaemia, and a rise in a 2-globulin frequently accompany a severe attack. Minor elevations of the aspartate transaminase or alkaline phosphatase are also frequently seen in patients with a severe attack, but they return to normal when the disease goes into remission. They probably reflect a fatty liver, together with the effects

of toxaemia or poor nutrition. Persistent elevation, especially of alkaline phosphatase, may indicate underlying chronic liver disease and needs further investigation (see below).

Serum immunoglobulins rarely exceed the upper limit of normal during a relapse, but usually fall as remission occurs.

Complications

Life-threatening colonic inflammation

This can occur in both ulcerative colitis and Crohn's colitis. In the most extreme cases, the colon dilates (toxic megacolon) and bacterial toxins pass freely across the diseased mucosa into the portal and then systemic circulation. This complication arises most commonly during the first attack of colitis. An abdominal X-ray should be taken daily because, when the transverse colon is dilated to more than 6 cm, there is a high risk of colonic perforation, although this complication can also occur in the absence of toxic megacolon. Severe colonic inflammation with toxic dilatation is a surgical emergency and most often requires colectomy.

Haemorrhage

Haemorrhage due to erosion of a major artery is rare but can occur in both conditions.

Fistulae

These are specific to Crohn's disease. Enteroenteric fistulae can cause diarrhoea and malabsorption due to blind loop syndrome. Enterovesicalfistulation causes recurrent urinary infections and pneumaturia. An enterovaginal fistula causes a faeculent vaginal discharge. Fistulation from the bowel may also cause perianal or ischiorectal abscesses, fissures and fistulae.

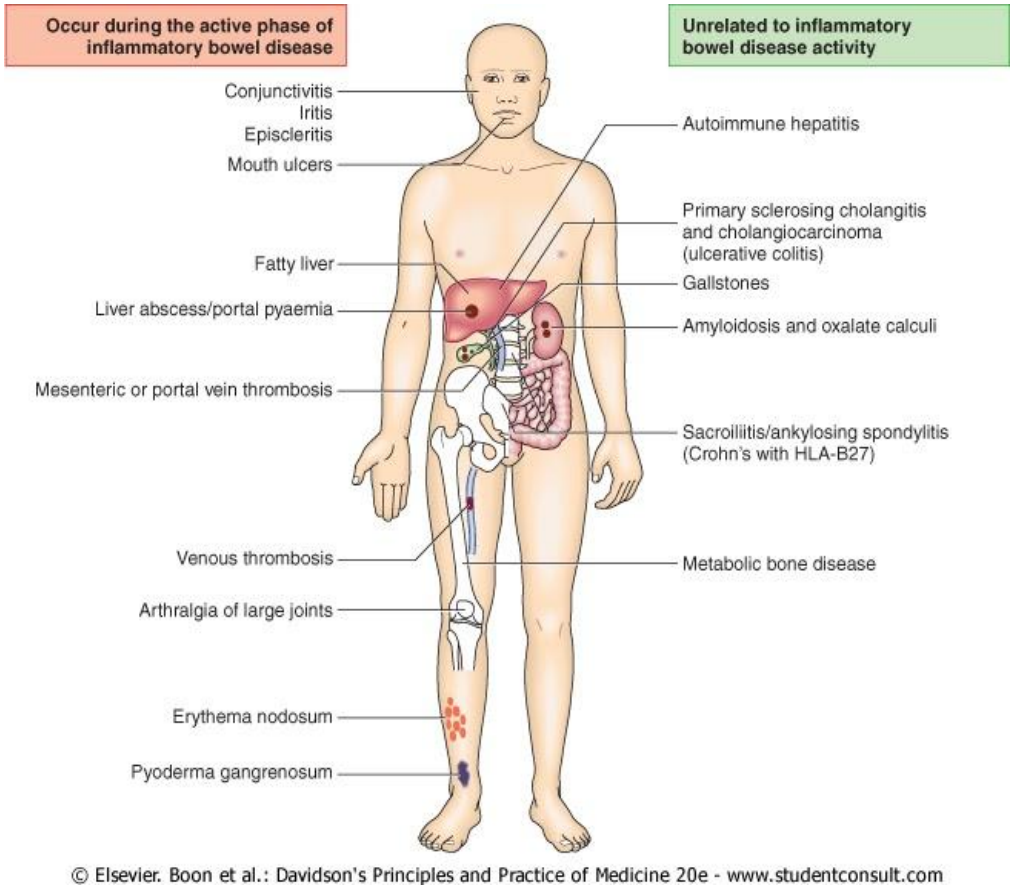
Cancer

The risk of dysplasia and cancer increases with the duration and extent of uncontrolled colonic inflammation. Thus patients who have long-standing, extensive colitis are at highest risk. Oral mesalazine therapy reduces the risk of dysplasia and neoplasia in ulcerative colitis. Azathioprine also seems to reduce the risk of colorectal cancer in ulcerative colitis and Crohn's colitis. This protective effect probably extends to any medical treatment that results in sustained healing of the colonic mucosa. Thecumulative risk for dysplasia in ulcerative colitis may be as high as 20% after 30

years but is probably lower for Crohn's colitis. The risk is particularly high in patients who have concomitant primary sclerosing cholangitis for unknown reasons. Tumours develop in areas of dysplasia and may be multiple. Patients with long-standing colitis are therefore entered into surveillance programmes beginning 10 years after diagnosis. Targeted biopsies of areas that show abnormalities on staining with indigo carmine or methylene blue increase the chance of detecting dysplasia and this technique (termed pancolonic chromo-endoscopy) has replaced colonoscopy with random biopsies taken every 10 cm in screening for malignancy. The procedure allows patients to be stratified into high-, medium- or low-risk groups to determine the interval between surveillance procedures. Family history of colon cancer is also an important factor to consider. If high-grade dysplasia is found, panproctocolectomy is usually recommended because of the high risk of colon cancer.

Extra-intestinal complications

Extra-intestinal complications are common in IBD and may dominate the clinical picture. Some of these occur during relapse of intestinal disease; others appear to be unrelated to intestinal disease activity.



Line of Treatment

"வைத்தியச் செயல் வைத்தியமாமே
பலவாறு மாறுதலடைந்து கெடுக்கின்ற உடலை நிலைக்கும்
மாறுதல் அணுகாணும் ஒரே தன்மையாக
செய்தும் அதனாலாஞ் செயிலக்குறைவின்றி
நடக்கச் செய்வது தெதுவோ அதுவே வைத்தியம்"

–திருமூலர் 800

So the Siddha treatment is not only for removal of disease, but for the prevention and improving the body condition. This is said as follows.

1. Kaappu (Prevention)
2. Neekkam (Treatment)
3. Niraivu (Restoration)

Siddha system has unequivocally stated that even during the time of conception, some defects creep into the fertilized embryo. The defects form the basis for the manifestation of certain constitutional diseases later on during the existence of the individual. The disease for which no known cause is given designated as diseases of idiopathic origin or hereditary disorders. In Siddha system such diseases are described as Karma noikal.

1. Kaappu (Prevention)

பிணியணுகா விதி

"திண்ண மிரண்டுள்ளே சிக்க வடக்காமற்
பெண்ணின்பா லொன்றைப் பெருக்காமல் - உண்ணுங்கால்
நீர்சுருக்கி மோர்பெருக்கி நெய்யுருக்கி யுண்பவர் தம்
பேருரைக்கிற் போமே பிணி"

-பதார்த்த குண சிந்தாமணி

In siddha system of medicine there are many ways to prevent disease by changing the lifestyle. It is well explained in Theraiyar Pinianugavidhi.

2. Neekkam (Treatment)

The Three Uyir Thathus which are responsible for organization, regularization and integration of the bodily structures and their physiological functions are always kept

in a state of equilibrium by word, thought, deed and food of the individual. The general aetiological factors for constitutional discomfort is said to be incompatible diet, mental and physical activities.

When treating for removal of the diseases, the following principles must be noted.

"நோய்நாடி நோய்முதல் நாடி அது தணிக்கும்
வாய்நாடி வாய்ப்பச் செயல்"

– திருக்குறள்

So it is essential to know the disease and the cause for the onset of the disease, before treating the patient so also to the nature of the patient, the severity of illness, the season and time of the occurrence of the diseases must be observed.

CLINICAL MANAGEMENT FOR DISEASE CONDITION

- Normalization of altered uyirthathukal
- Internal medicines
- Diet

2.1 NORMALIZATION OF ALTERED UYIRTHATHUKAL

குடலாகிய வாதத்தின் இருப்பிடத்தில் பித்தம் சேர்ந்து புண் உண்டாகிறது. வாத பித்தத்தை தணிக்கிற இனிப்பு சுவையுடைய மருந்துகளை முதலில் கொடுக்க வேண்டும். இனிப்பு சுவை என்பது நீர் பதத்தை உடையது, அதற்கு புண்ணையாற்றும் குணம் இல்லை, துவர்ப்பு சுவைக்கு புண்ணையாற்றும் குணம் உண்டு. ஆகவே இனிப்பையும், துவர்ப்பையும் மாற்றி மாற்றி கொடுக்க வேண்டும்.

பால், நெய், தேன் ஆகியவற்றிற்கு முக்கிய பங்கு உண்டு. நெய்யும், தேனும் பயன்படுத்தும் போது இரண்டும் சம அளவில் இருக்கக் கூடாது. அதில் ஒன்று கூடி ஒன்று குறைந்ததாக இருக்க வேண்டும்.

கீழ்கண்ட மருந்துகளை கொடுக்கலாம்.

- ✓ கொம்பரக்கு,
- ✓ மாசிக்காய்,
- ✓ அதிமதுரம்,

- ✓ ஆலம்பட்டை
- ✓ காய்ச்சுக்கட்டி

போன்றவை இந்நோய்க்கு சிறந்ததாகும்.

2.2 INTERNAL MEDICINES

1. துவர்ப்புச் சுவையுடைய மருந்துகள்
2. இனிப்புச் சுவையுடைய மருந்துகள்

2.3 DIET AND RESTRICTION

குடலாகிய வாதத்தின் இருப்பிடத்தில் பித்தம் சேர்ந்து புண் உண்டாகிறது. வாத பித்தத்தை தணிக்கிற இனிப்பு சுவையுடைய மருந்துகளை முதலில் கொடுக்க வேண்டும். இனிப்பு சுவை என்பது நீர் பதத்தை உடையது, அதற்கு புண்ணையாற்றும் குணம் இல்லை, துவர்ப்பு சுவைக்கு புண்ணையாற்றும் குணம் உண்டு. ஆகவே இனிப்பையும், துவர்ப்பையும் மாற்றி மாற்றி கொடுக்க வேண்டும்.

Pathiyam

- Butter milk
- Milk
- Tender coconut
- Manathakkali
- Green gram
- Sugarcane
- Jaggery
- Greens
- Pudal
- Senai
- Pomegranate
- Vilampazham
- Tea without milk

Apathiyam

- Avoid Spicy, Salty, Sour foods, Dhals
- Avoid non-vegetarian diets

- Avoid excessive anger
- Avoid dried ginger, garlic, black gram, Perungayam (asafoetida), chicken, alcohol.

1. NIRAIVU (RESTORATION)

Patient needs good discussion and motivation and persuation to accept the eventuality of Pitha disease and prepare for a lifestyle that provides optimization of metabolic status. In suitable effective medicinal preparations have to be administered in the beginning itself to neutralize and eliminate this disease.Siddhars aimed at bringing the three doshas in equilibrium in the treatment of disease. Towards this end we treat with herbs and mineral preparations are used, while treating the Vatham level in the body. Siddhars prescribed a minimum dosage initially and then increased the dose gradually. There are thousand preparations for Pitham and for its complications found in various Siddha text books Kudineer, Chooranams, Ilahams, Parpam and chenduram. Siddha system lays a great importance on the observation of rules regarding diet in everyday life because the Siddha system has rightly realized, that the basic factor of the body is food. That is Annamayakosam is the first among the five kosams constituting our physical and mental existence. To prevent the occurrence of the disease, elaborate inference regarding food item in our daily diet is given in the textbook of Siddha,

“மாறுபாடில்லாத வுண்டி மறுத்துண்ணின்
ஊறுபாடி ல்லையு யிர்க்கு”

–திருக்குறள்

Generally when a medicine is administrated Siddha physician prescribes diet regimen according to the nature of the medicine and severity of the disease. As over intake or consuming unbalanced and incompatible diet is considered to be the prime causative factor for upsetting the Thirithosha balance leading to the manifestations of various ailments. Regarding diet regimen in Vatham there is special instructions found in Patharthagunasinthamani and other books.

10. MATERIALS AND METHODS

1. STUDY TYPE

- Observational study type

2. STUDY DESIGN

- An Analytical, open label, single centric study

3. STUDY PLACE

- OPD & IPD National Institute of Siddha, Chennai-47.

4. SAMPLE SIZE

Patients - 20

5. SELECTION & WITHDRAWAL OF SUBJECTS

5.1. INCLUSION CRITERIA

1. Age 15-70 yrs
2. Abdominal pain
3. Bloody diarrhoea with mucus
4. Fever
5. Paleness (Anaemia)
6. Dizziness or weakness
7. Anorexia
8. Sour taste of the tongue

Patients who fulfill any 4 symptoms of the criteria was included in the study.

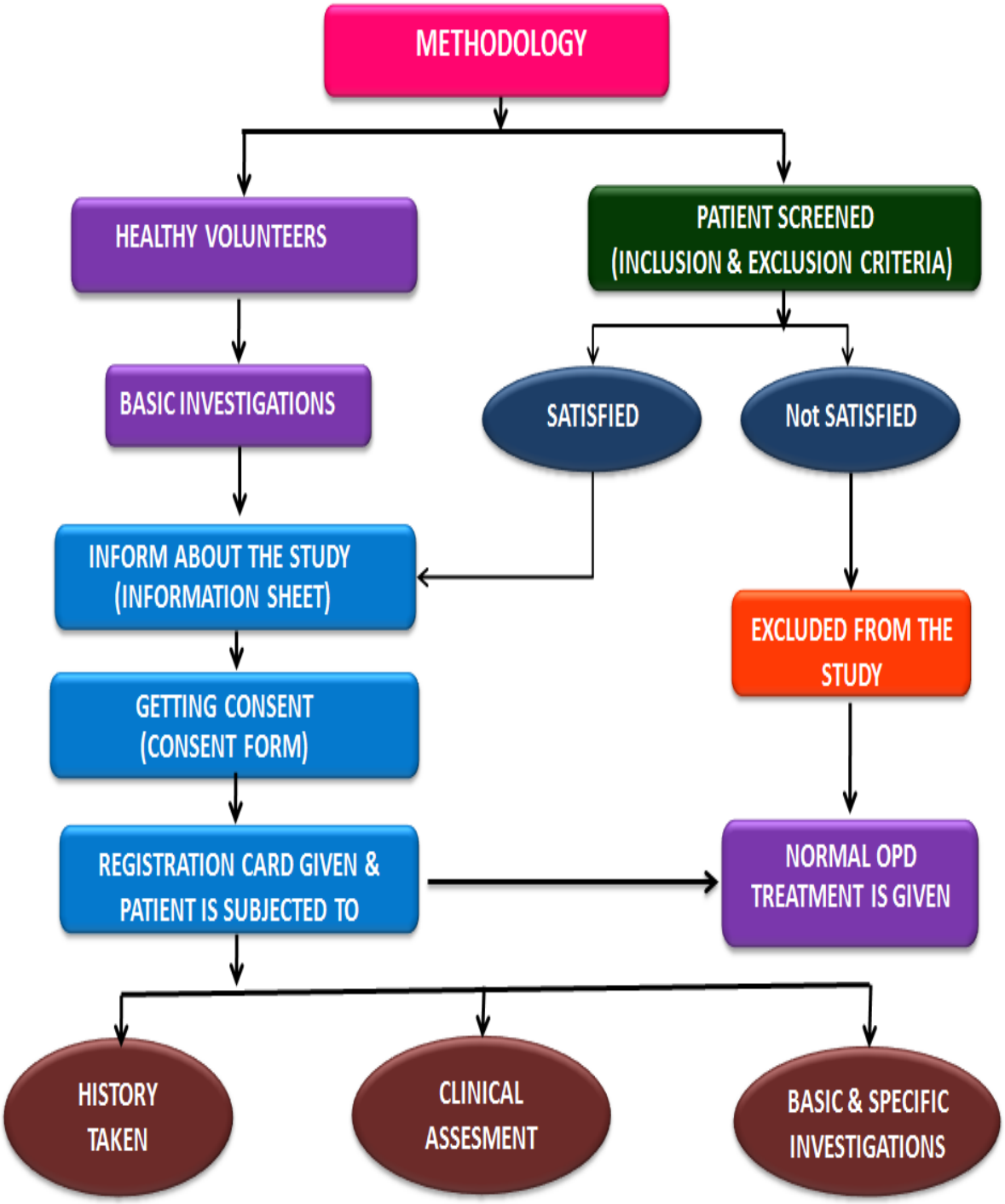
5.2. EXCLUSION CRITERIA

1. Any severe systemic illness
2. Vulnerable group
3. Irritable Bowel Syndrome
4. Rectal varices
5. Malignancies

6. Withdrawal Criteria

1. Those lost in follow up
2. Those who are not willing for physical examination
3. Those who are not willing for investigation

7.METHODOLOGY



8. INVESTIGATIONS

A.SIDDHA PARAMETERS

1. Eight fold examination

a.Naadi

- Naadi nithanam
- Naadi nadai

b.Meikuri (Physical Signs)

- Veppam
- ·Viyarvai
- Thodu Vali

c. Naa (Tongue)

- Maa padithal
- Niram,
- Suvai
- Vaineer Ooral
- Vedippu

d.Niram (Complexion)

- Karuppu
- Manjal
- Veluppu

e.Mozhi (Voice)

- Sama oli
- Urattha oli
- Thazhntha oli

f.Vizhi (Eyes)

- Niram
- Kanneer Vadithal
- Erichal
- Peelai Seruthal

g.Malam (Stools)

- Niram
- Sikkal

- Sirutthal
- Kalichal
- Seetham

h.Moothiram (Urine)

1.a. Neerkuri

- Niram
- Manam
- Edai
- Alavu
- Nurai
- Enjal

1.b.Neikuri

2. Manikkadai Nool

3. Yakkai Elakkanam

B.MODERN PARAMETERS

BLOOD

- Hb
- TC
- DC
- ESR
- Blood Sugar (F&PP)
- S. Cholesterol

URINE

- Albumin
- Sugar
- Deposits

MOTION

- Ova
- Cyst
- Occult blood

C.SPECIAL INVESTIGATIONS

Colonoscopy (if necessary)

9. DATA COLLECTION

Case Record Form

Annexure I : Screening and selection proforma

Annexure IA : History proforma

Annexure II : Clinical Assessment Form

Annexure III : Laboratory Investigations

Aannexure IV : Informed Written Consent Form

Annexure IVA: Patient Information Sheet

10. DATA MANAGEMENT

After enrolling the patient in the study, a separate file for each patient was opened and all forms were filled in the file. Study No. and Patient No. was entered onthe top of file for easy identification and arranged in a separate rack atthe concerned OPDunit. Whenever study patient visits OPD during the study period, the respective patient file was taken and necessary recordings were made at the case record form or othersuitable form. The Data recordings were monitored for completion and compliance ofpatients by HOD and Sr. Research Officer (Statistics). All forms was further scrutinized in presence of Investigators by Sr. Research Officer (Statistics) for logicalerrors and incompleteness of data before entering onto computer to avoid any bias. Nomodification in the results is permitted for unbiased report. All collected data was entered using MS access software onto computer. Investigators was trained to enter thepatient data and cross checked by SRO.

11. STATISTICAL ANALYSIS

All collected data was entered into computer and the neikuri shape was recorded as per literature. The shape association with Normal healthy individuals in patients with Vanni Pitham was descriptively analyzed and presented.The chi-square, Mantel-Hanzel chi-square, Proportion test was used todetermine the significance of a variable. Multivariate analysis – Factor analysis was also be performed to determine the factors associated with neikuri shapes. Probability lessthan 0.05 will be taken as significance.

12. ETHICAL ISSUE

- Patients was examined and screened unbiased manner and subjected to the criteria.
- Informed consent was obtained from the patient in writing, explaining in the understandable language to the patient.
- The data collected from the patient was kept confidentially. The patient was explained about the diagnosis.
- To prevent any infection, while collecting blood sample from the patient, only disposable syringes, disposable gloves, with proper sterilization of lab equipments
  are be used.
- This study involves only the necessary investigations (mentioned in the protocol) and no other investigation would be done.
- Normal treatment procedure followed in NIS was prescribed to the studypatients and the treatment was provided at free of cost.
- There was no infringement on the rights of patient.

11.1. Age distribution

S.no	Age	No. Of cases	Percentage %
1	20-30	7	35
2	30-40	3	15
3	40-50	4	20
4	50-60	4	20
5	60-70	2	10
6	**Total**	**20**	**100**

Table. 1 Age distribution

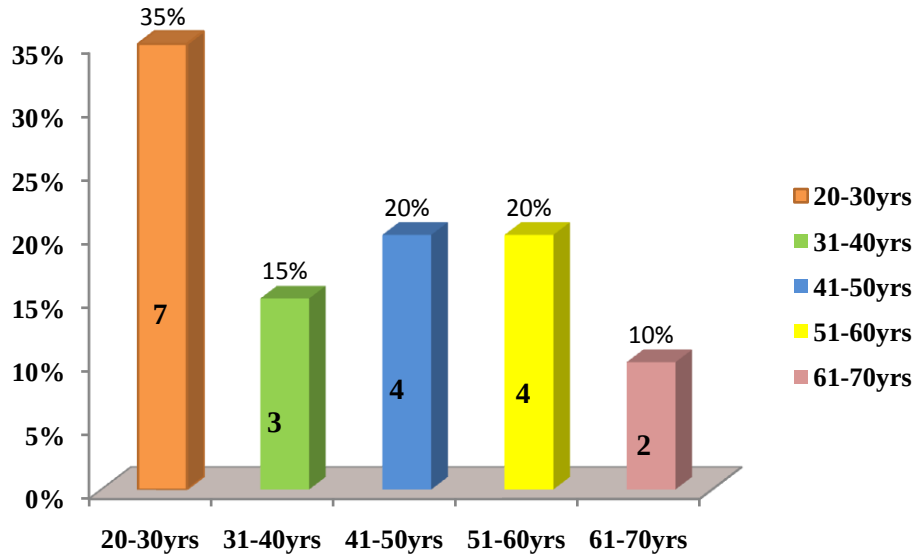


Figure.1 Age Distribution

OBSERVATION

Out of 20 cases 7 cases (35%) fell under the group of 20-30 years of age, 3cases (15%) fell under group of 31-40 years of age, 4 cases (20%) fell under the group of 41-50 years of age, 4 cases (20%) fell under the group of 51-60 years of age, and 2 cases (10%) fell under the group of 61-70 years of age.

INFERENCE

In this study majority of cases (35%) were between the age group of 20 -30 years. young age group patients reported more in NIS OPD for the study.

11.2. Sex Determination

Sex determination	No.of cases	Percentage %
Male	11	55
Female	9	45
Total	**20**	**100**

Table - 2.Sex determination

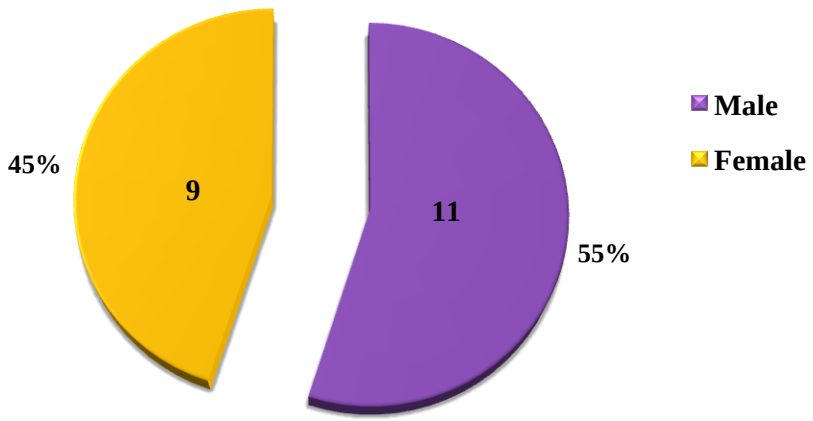


Figure 2 - Sex determination

OBSERVATION

Among 20 cases 11 (55%) cases were Males, 9 (45%) cases were Females.

INFERENCE

In this study 55% cases were Males. Incidence of Vanni Pitham is more in males than females in NIS OPD population.

11.3 .Food Habits

Food habits	No.of cases	Percentage %
Vegetarian	1	5
Non vegetarian	19	95
Total	**20**	**100**

Table - 3.Food habits

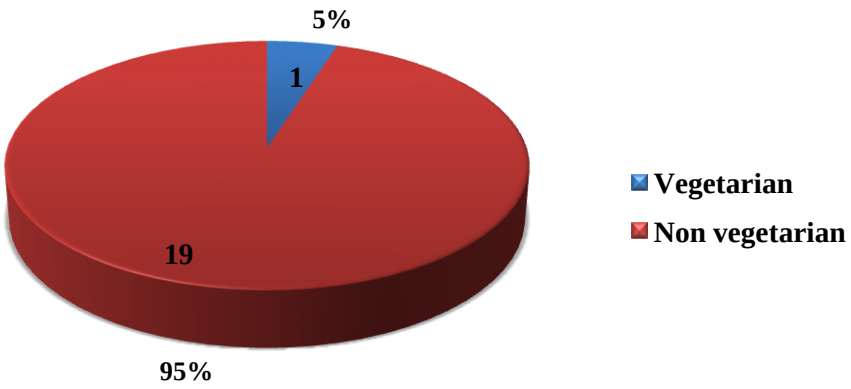


Figure 3 – Food habits

OBSERVATION

Among 20 cases 19 (95%) cases were being non vegetarian and 1 (5%) case was being vegetarian.

INFERENCE

Most of the cases belonged to non vegetarian. Non-Vegetarian diet patients reported more in NIS OPD for this study condition.

11.4 Socio Economic Status

Economic status	No.ofcsaes	Percentage %
Low income group	2	10
Middle income group	18	90
High income group	0	0
Total	**20**	**100**

Table.4 Socio Economic Status

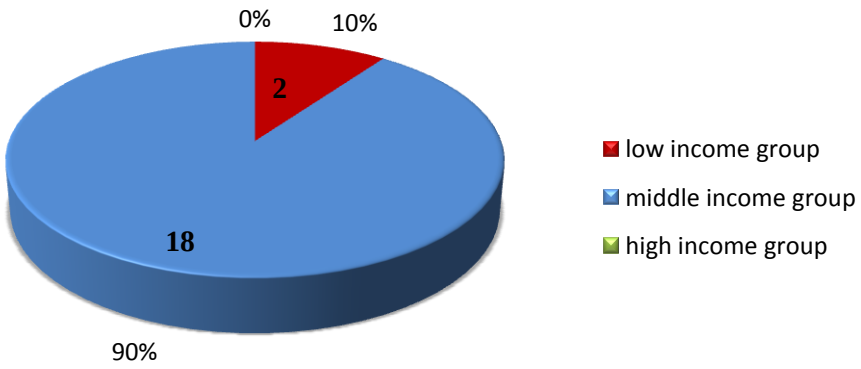


Figure 4 – Socio Economic status

OBSERVATION

Among 20 cases 18 (90%) cases were middle income group, 2 cases (10%) were low income group.

INFERENCE

In this study most of the cases belonged to middle income group. The middle income group due to to there life style and habits are prone to have Vanni Pitham.

11.5 Kaalam

Kaalam	No.of cases	Percentage %
Vaathakaalam (0-33)	8	40
Pithakaalam (34-66)	8	40
Kaphakaalam (67-100)	4	20

Table.5 Kaalam

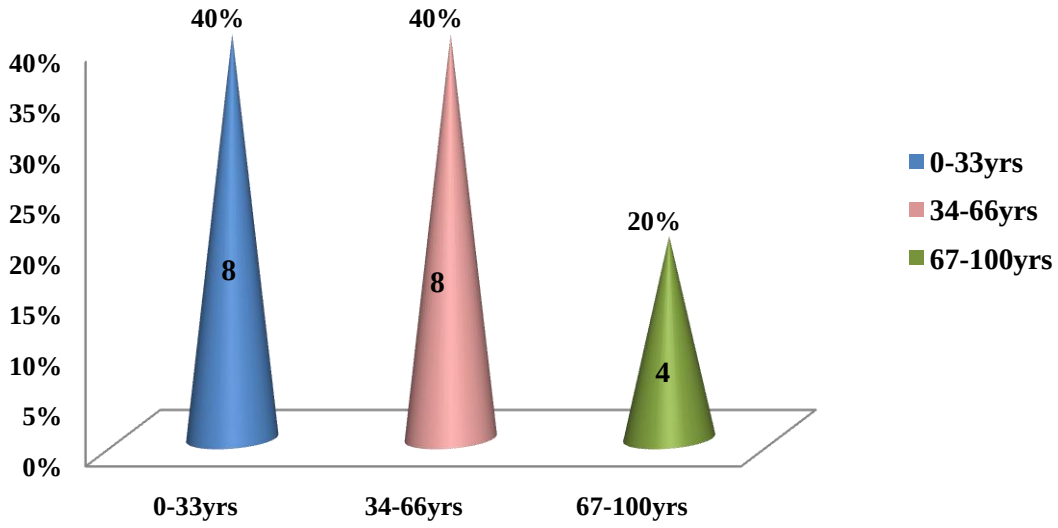


Figure 5.Kaalam

OBSERVATION

Out of 20 cases, 8 cases (40%) were observed in Vaathakaalam, 8 cases (40%) were observed in Pithakaalam, 4 cases (20%) were observed in Kaphakaalam.

INFERENCE

This observation results showed, Vaathakaalam and Pithakaalam is more prone to the disease Vanni Pitham.

11.6. Clinical Features

Symptoms	No. of cases	Percentage %
Abdominal discomfort	20	100
Fever	3	15
Bloody diarrhea with mucus	20	100
Paleness (Anaemia)	10	50
Dizziness	18	90
Anorexia	18	90
Sour taste	5	25

Table - 6. Clinical Features

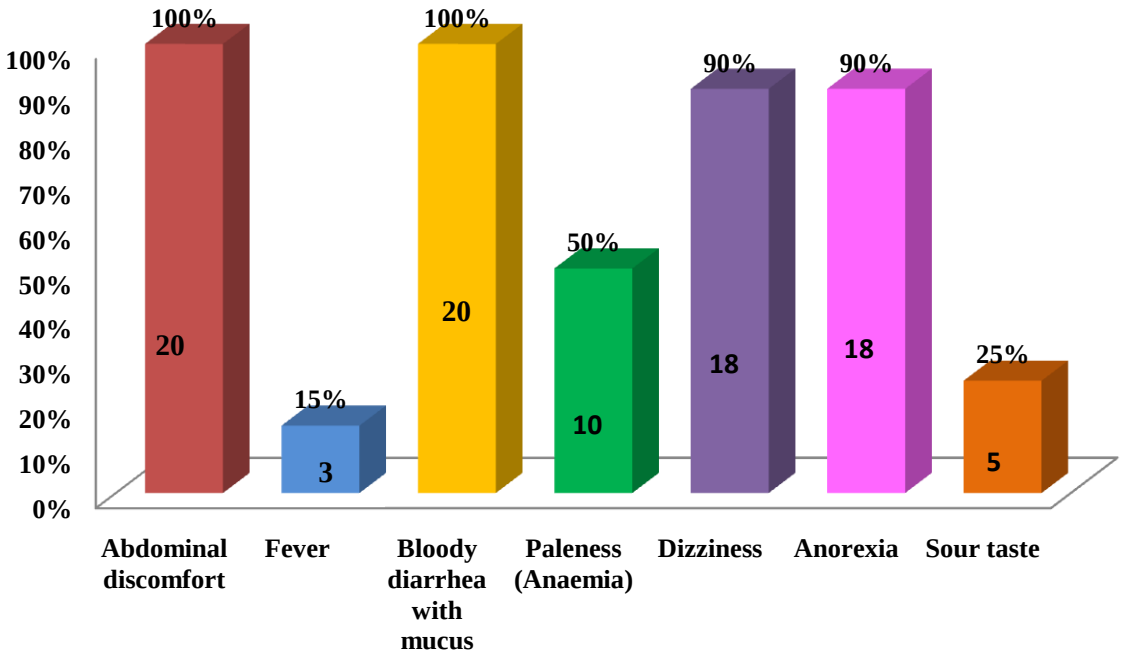


Figure 6. Clinical Features

OBSERVATION

Out of 20 cases, all the 20 cases (100%) had the symptoms of Abdominal discomfort, Bloody diarrhea with mucus, 18 cases (90%) had the symptoms of Dizziness and anorexia, 10 cases (50%) had Paleness of the body, 5 cases (25%) had Sour taste of the tongue, 3 cases (15%) had Fever.

INFERENCE

In this study majority of the cases had Abdominal discomfort, Bloody diarrhea with mucus, Anorexia and dizziness. 50% of cases had Paleness of the body (Anaemai) and least cases reported fever and sour taste of the tongue.

11.7 Yakkai

S. No	YAKKAI	VanniPitham	
		No.of cases	Percentage %
1.	Vatham	0	**0**
2.	VathaPitham	11	**55**
3.	Vathakapham	4	**20**
4.	Pitham	0	**0**
5.	PithaVatham	1	**5**
6.	Pithakapham	1	**5**
7.	Kapham	0	**0**
8.	KaphaVatham	3	**15**
9.	KaphaPitham	0	**0**
	Total	20	**100**

Table 7. Yakkai

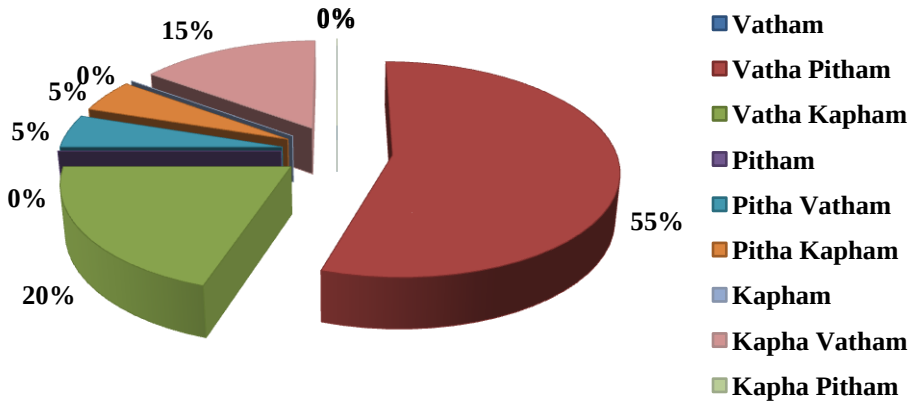


Figure 7 – Yakkai

OBSERVATION

Among the 20 cases, 11 cases (55%) were Vathapitham, 4 cases (20%) were vathakapham, 3 cases (15%) cases were kabavatham, each one cases were Pithavatham and Pithakabam.

INFERENCE

Majority of the cases belonged to Vatha Pitham constitution. The observation results showed Vatha thontha temperament patients were prone to the disease Vanni Pitham.

11.8 Noi Utra Kaalam

Noi Utra Kaalam	No. of cases	Percentage %
Kaar kaalam	1	5
Koothir kaalam	2	10
Munpani kaalam	1	5
Pinpani kaalam	6	30
Elavenil kaalam	7	35
Mudhuvenil kaalam	3	15
Total	**20**	**100**

Table.8 Noi Utra Kaalam

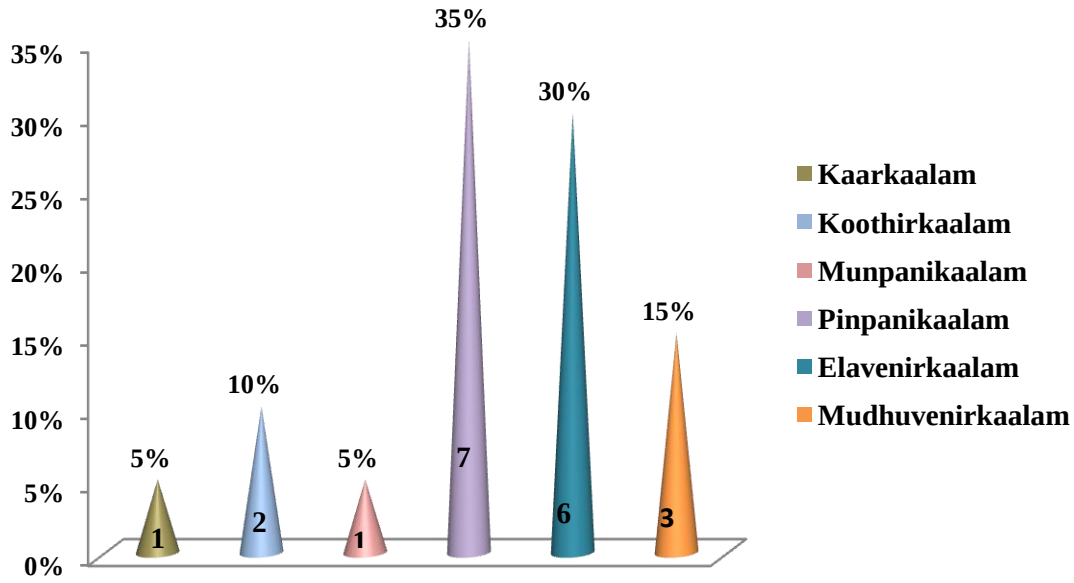


Figure 8 – Noi Utra Kaalam

OBSERVATION

Among 20 cases 7 cases (35%) had affected at Elavenil kaalam, 6 cases (30%) had affected at Pinpani kaalam, 3 cases (15%) had affected at Muthuvenil kaalam, 2 cases (10%) had affected at Koothir kaalam, One of each cases had affected at Kaar kaalam and Munpani kaalam.

INFERENCE

In this study 35% cases had affected at Elavenil kaalam and 30 % cases had affected at Pinpani kaalam. The occurance of disease is mostly during Elavenil kaalam (Chithirai,Vaigasi).

11.9 Noi Utra Nilam

Noi Utra Nilam	No. of cases	Percentage %
Kurinji	1	5
Mulli	0	0
Marutham	19	95
Neithal	0	0
Paali	0	0
Total	**20**	**100**

Table.9 Noi Utra Nilam

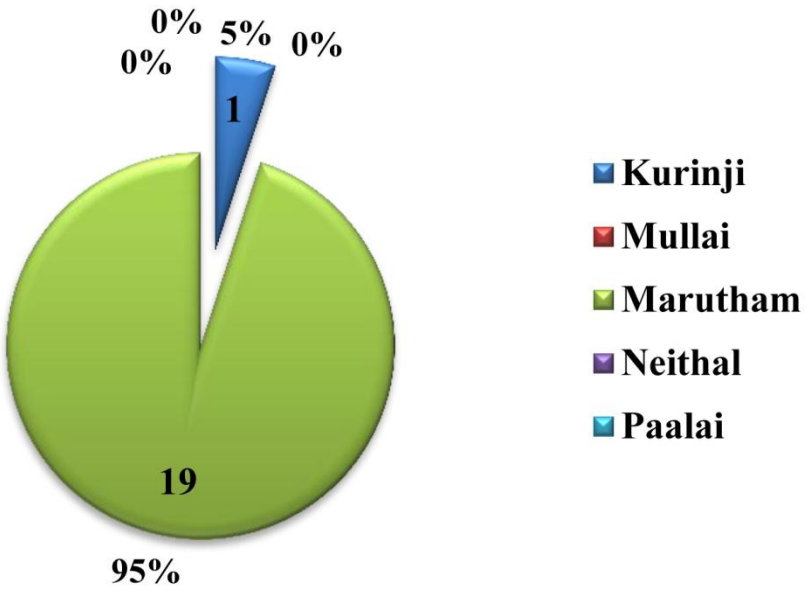


Figure 9 Noi Utra Nilam

OBSERVATION

Out of 20 cases 19 cases (95%) had affected in Marutha Nilam, 1 case (5%) had affected in Kurinji Nilam.

INFERENCE

In this study most of the cases had affected in Marutha Nilam.

11.10 Gnanenthiriyangal

Gnanenthiriyangal	No of cases	Percentage %
Sevi	0	0
Mei	0	0
Kan	0	0
Naakku	5	25
Mookku	0	0
Normal	15	75
Total	**20**	**100**

Table. 10 Gnanenthiriyangal

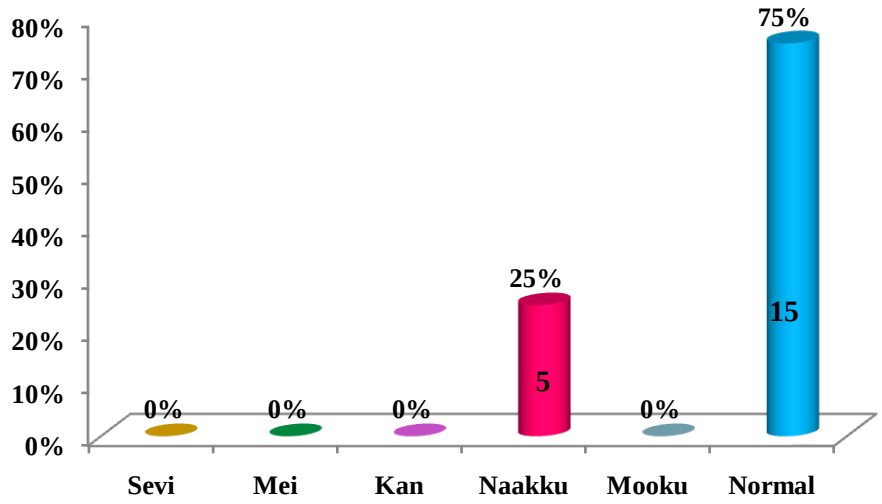


Fig. 10 Gnanenthiriyangal

OBSERVATION

Among 20 cases, Naakku affected for 5 cases (25%) resulting sour taste of the tongue.

INFERENCE

In this study, Naakku affected in majority of the cases.

11.11 Kanmenthiriyangal

Kanmenthiriyangal	No of cases	Percentage %
Vaai	5	25
Kaal	0	0
Kai	0	0
Eruvaai	20	100
Karuvaai	0	0

Table 11 Kanmenthiriyangal

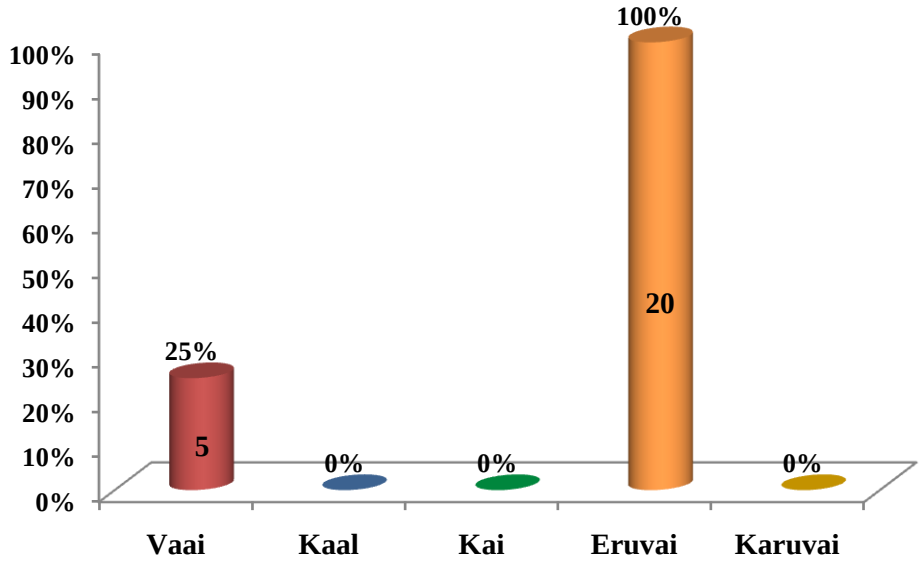


Fig. 11 Kanmenthiriyangal

OBSERVATION

In Kanmentheriyangal, Eruvaai affected for 20 (100%) cases due to bloody diarrhoea with mucus. Vaai affected for 5 cases (25%) due to sour taste of the tongue.

INFERENCE

In this study Eruvaai (100%) affected in all cases.

11.12 Udal Thathukkal

Udal Thathukkal	No. of cases	Percentage %
Saaram	20	100
Senneer	20	100
Oon	11	55
Kozhuppu	8	40
Enbu	7	35
Moolai	0	0
Sukkilam/Suronitham	0	0

Table. 12 Udal Thathukkal

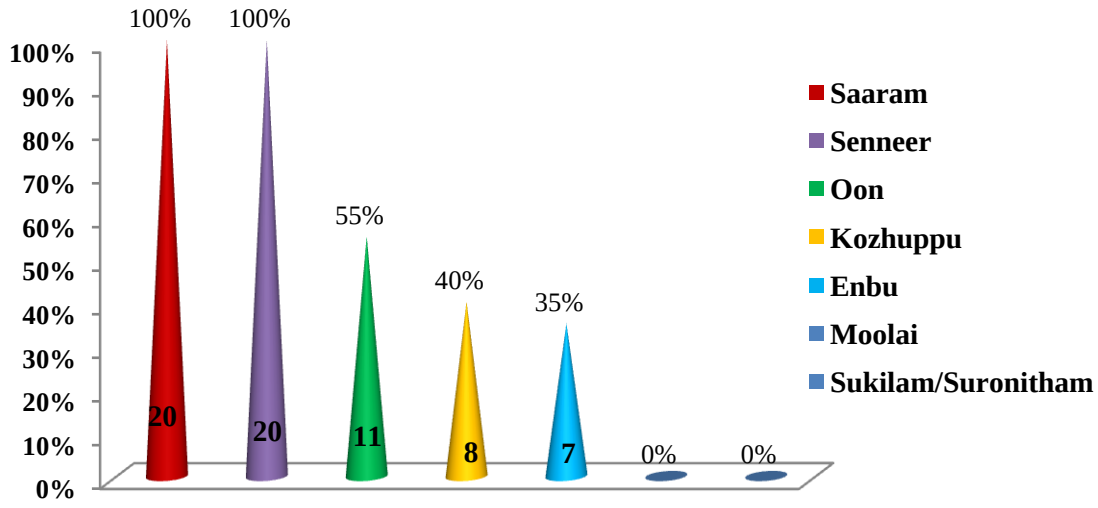


Figure 12 Udal Thathukkal

OBSERVATION

Among the seven somatic components of 20 cases, all the 20 cases (100%) had affected Saaram and Senneer. 11 cases (55%) had affected Oon, 8 cases (40%) had affected Kozhuppu, 7 cases (35%) had affected Enbu.

INFERENCE

In this study, all the cases (100%) had deranged Saaram and Senneer.

11.13 Uyir Thathukkal – Vali

Uyir Thathukkal	No. of cases	Percentage %
Pranan	0	0
Abanan	20	100
Samanan	20	100
Uthanan	2	10
Viyanan	20	100
Naahan	0	0
Koorman	0	0
Kirukaran	0	0
Devathathan	20	100
Dhananjeyan	0	0

Table.13 Uyir Thathukkal – Vali

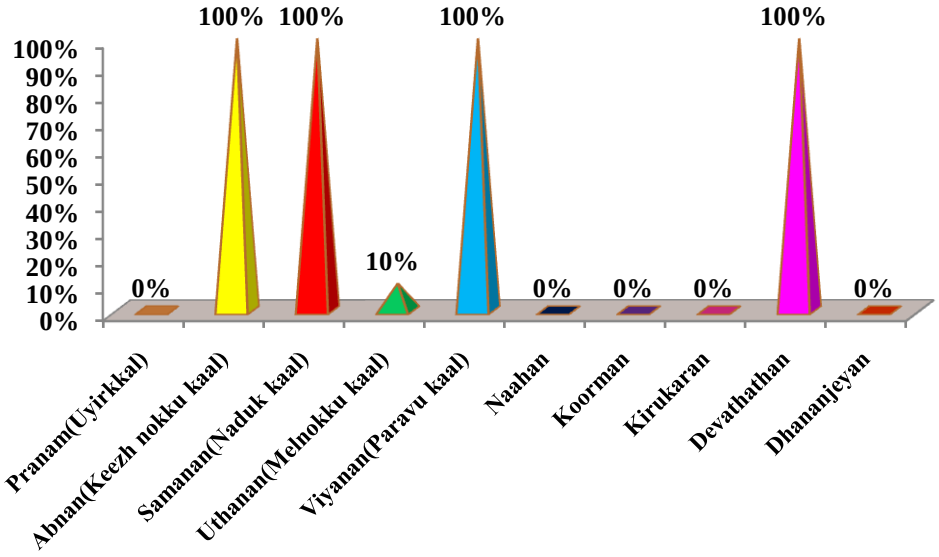


Figure 13- Uyir Thathukkal – Vali

OBSERVATION

Out of 20 cases, all the cases (100%) had derangement in Abanan, Samanan, Viyanan and Devathathan. 2 cases (10%) had derangement in Uthanan.

INFERENCE

All the cases inducted in the study had Abanan, Samanan, Viyanan and Devathathan components of Vatham humour affected.

11.14 Uyir Thathukkal - Azhal

Azhal	No of cases	Percentage %
Analagam	4	20
Prasakam	0	0
Ranjagam	10	50
Alosagam	0	0
Saathagam	20	100

Table. 14 Uyir Thathukkal - Azhal

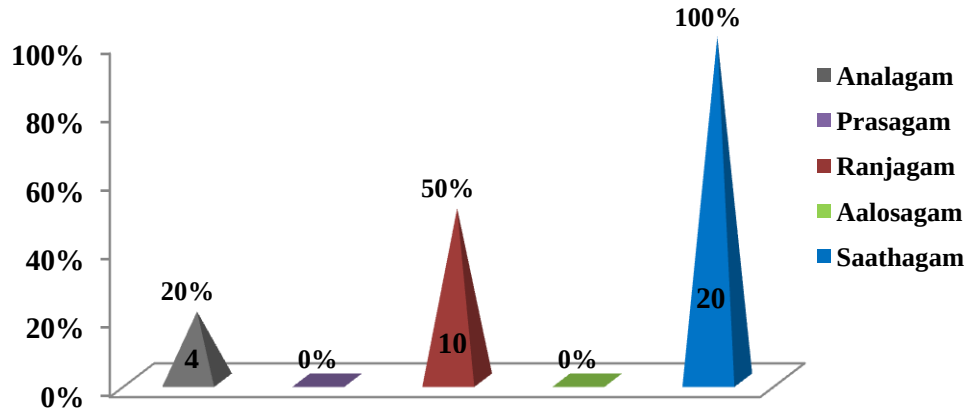


Figure 14. Uyir Thathukkal - Azhal

OBSERVATION

Out of 20 cases, all the cases (100%) had derangement in Saathaga Pitham, 10 cases (50%) had derangement in Ranjaga Pitham, 4 cases (20%) had derangement in Anala Pitham.

INFERENCE

All the patients inducted in the study had Saathagam component of Pitham humour affected.

11.15 Uyir Thathukkal – Iyyam

Iyyam	No. of cases	Percentage %
Avlambagam	0	0
Kilethagam	18	90
Pothagam	0	0
Tharpagam	0	0
Santhigam	4	20

Table.15 Uyir Thathukkal – Iyyam

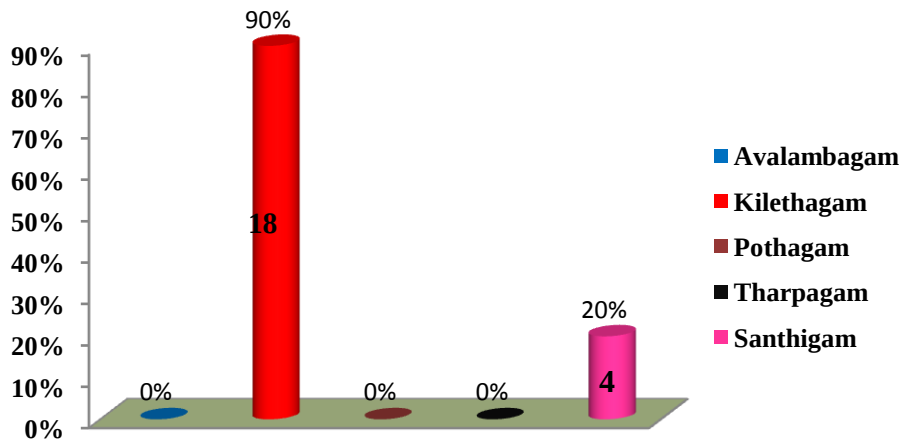


Figure 15.Uyirthathukkal – Iyyam

OBSERVATION

Out of 20 cases, 18 cases (90%) had derangement in Kilethagam, 4 cases had derangement in Santhigam.

INFERENCE

In Iyyam most of the cases had derangement in Kilethagam.

11.16. Envagai Thervugal - Naa

NAA		No. of cases	Percentage %
Thanmai	Maapadithal	3	15
	Vedippu	4	20
	Iyalbu	13	65
	Total	**20**	**100**
Niram	Karuppu	0	0
	Manjal	4	20
	Veluppu	12	60
	Iyalbu	4	20
	Total	**20**	**100**
Suvai	Kaippu	0	0
	Pulippu	7	35
	Inippu	2	10
	Iyalbu	11	55
	Total	**20**	**100**
Vaineerooral	Kuraivu	0	0
	Iyalbu	20	100
	Total	**20**	**100**

Table 16. Envagai Thervugal - Naa

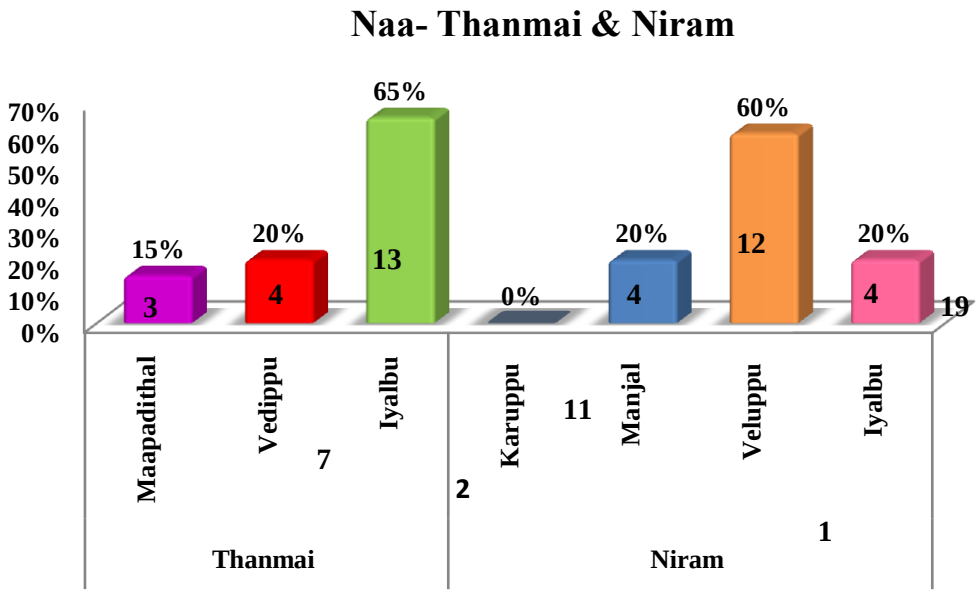


Figure 16. Naa- Thanmai & Niram

OBSERVATION

Among 20 cases, 3 cases (15%) had coated tongue, 4 cases (20%) had fissured tongue, 13 cases (65%) had normal tongue.

Among 20 cases, 4 cases (20%) had yellow pigmented tongue, 4 cases (20%) had normal tongue, 12 cases (60%) had Pallor tongue.

INFERENCE

The colour of the tongue was Pallor in 60% of cases and the nature of the tongue was Normal in 65% of cases.

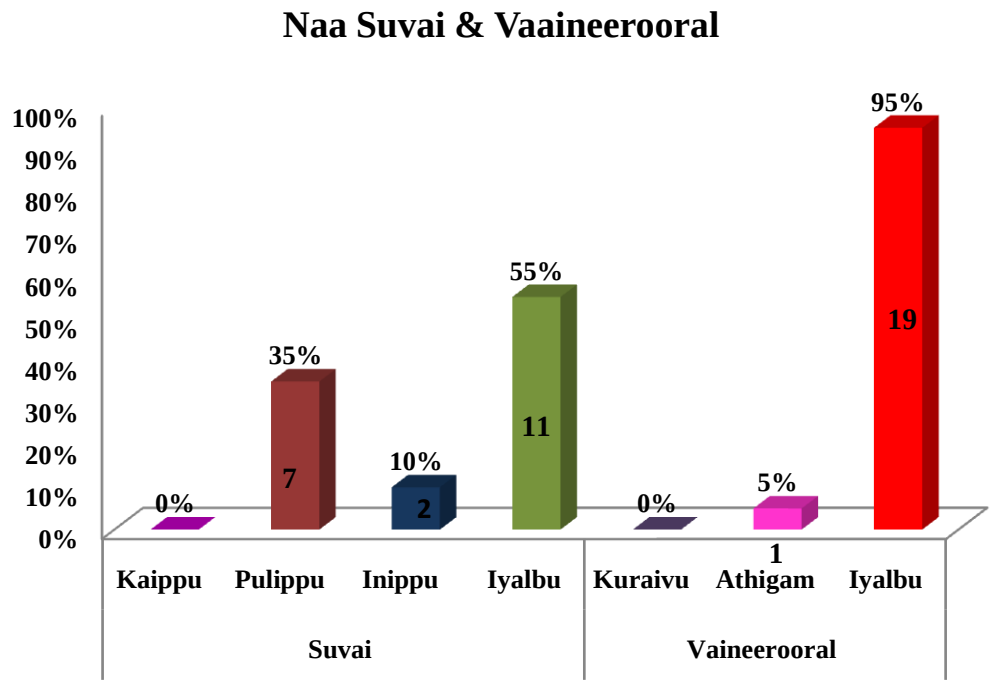


Figure 17. Naa – Suvai & Vaaineerooral

OBSERVATON

In 20 cases, 2 cases (10%) were sweet taste, 7 cases (35%) were sour taste, 11 cases were normal taste of the tongue. In 20 cases 1 case (5%) had excessive salivation, 19 cases (95%) had normal salivation.

INFERENCE

In this study majority of the cases had normal taste of the tongue and normal salivation.

11.17. Niram, Mozhi and Vizhi

Niram, Mozhi and Vizhi		No. of cases	Percentage %
Niram	Karuppu	10	50
	Manjal	6	30
	Veluppu	4	20
	Total	**20**	**100**
Mozhi	Samaoli	15	75
	Urathaoli	0	0
	Thazhnthaoli	5	25
	Total	**20**	**100**
VizhiyinNiram	Karuppu	0	0
	Manjal	0	0
	Sivappu	0	0
	Veluppu	7	35
	Iyalbu	13	65
	Total	**20**	**100**
VizhiyinThanmai	Kanneer	0	0
	KanErichal	5	25
	Peelaiseruthal	0	0
	Iyalbu	15	75
	Total	**20**	**100**

Table 17. Niram, Mozhi and Vizhi

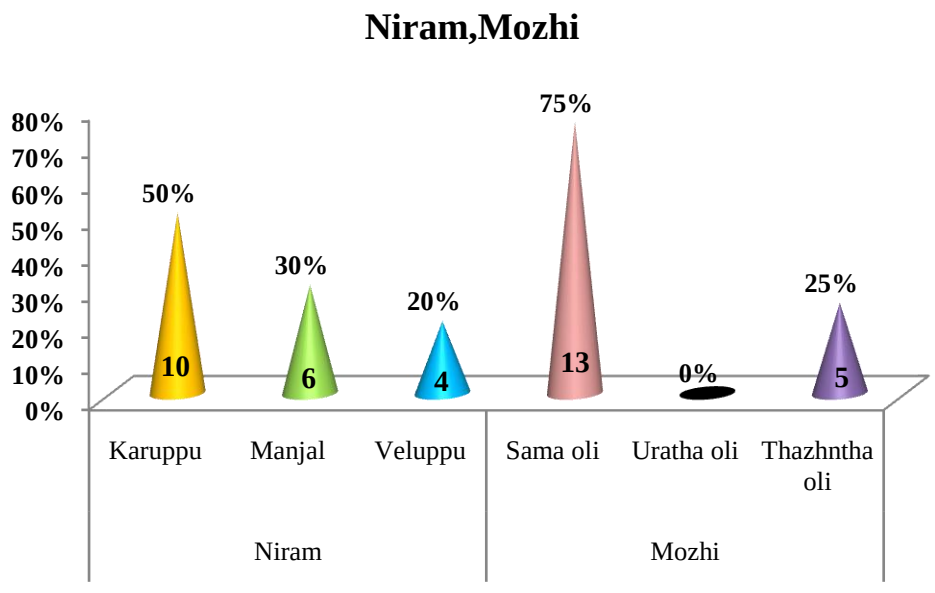


Figure 18. Niram, Mozhi

OBSERVATION

Out of 20 cases, 10 cases (50%) were of black complexion, 6 cases (30%) were of yellowish complexion and 4 cases (20%) were of pale complexion. Out of 20 cases 5 cases (25%) had low pitched voice, 15 cases (75%) had middle pitched voice.

INFERENCE

In this study majority of the cases reported with black color complexion and middle pitched voice. As most of the Indians are darkness in color, 50% of cases found to be darkish. No specific inference could be made out in this study from the examination of Niram.

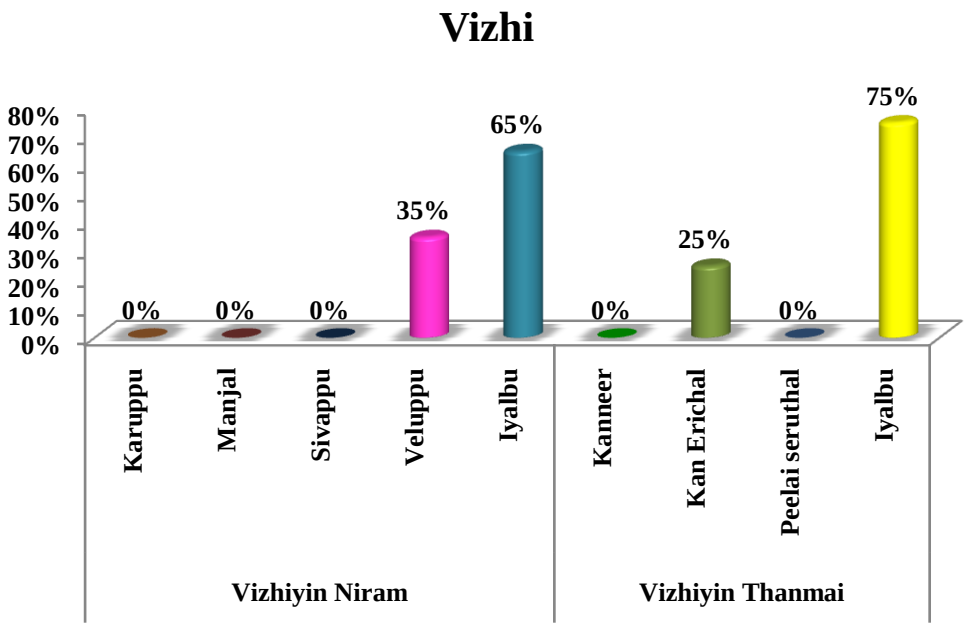


Figure 19.Vizhi – Niram&Thanmai

OBSERVATION

Among 20 cases, 7 cases (35%) were Veluppu in VizhiyinNiram, 13 cases had normal in Vizhiyinniram, 5 cases (25%) had kanerichal and 15 cases (75%) were normal in Vizhiyinthanmai.

INFERENCE

Majority of the patients in the study had seen with normal eyes. No specific inference had made from vizhi examination.

11.18. Naadi

Naadi	No. of cases	Percentage %
Vatham	0	0
VathaPitham	5	25
VathaKapham	0	0
Pitham	0	0
PithaVatham	9	45
PithaKapham	5	25
Kapham	0	0
KaphaVatham	0	0
KaphaPitham	1	5
Total	**20**	**100**

Table 18. Naadi

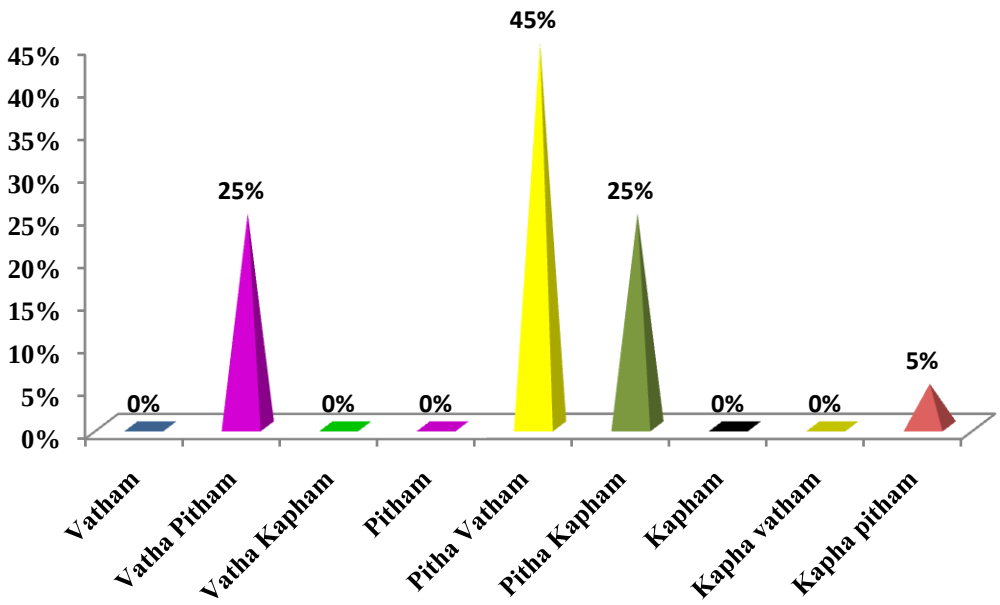


Figure 20. Naadi Nadai

OBSERVATION

Out of 20 cases, 9 cases (45%) had Pithavatham, 5 cases (25%) had Vathapitham, 5 cases (25%) had Pithakabam, 1 case (5%) had Kabapitham.

INFERENCE

In this study most of the cases had Pithavatha naadi in nature.

11.19. Naadi Nithanam & Panbu

Naadi		No. of cases	Percentage %
NaadiNithanam (Pulse Appraisal)	Vanmai	7	35
	Menmai	13	65
	Total	**20**	**100**
NaadiPanbu (Pulse Character)	Thannadai	4	20
	Ilaithal	12	60
	Kuthithal	4	20
	Thullal	0	0
	Total	**20**	**100**

Table 19. Naadi Nithanam & Panbu

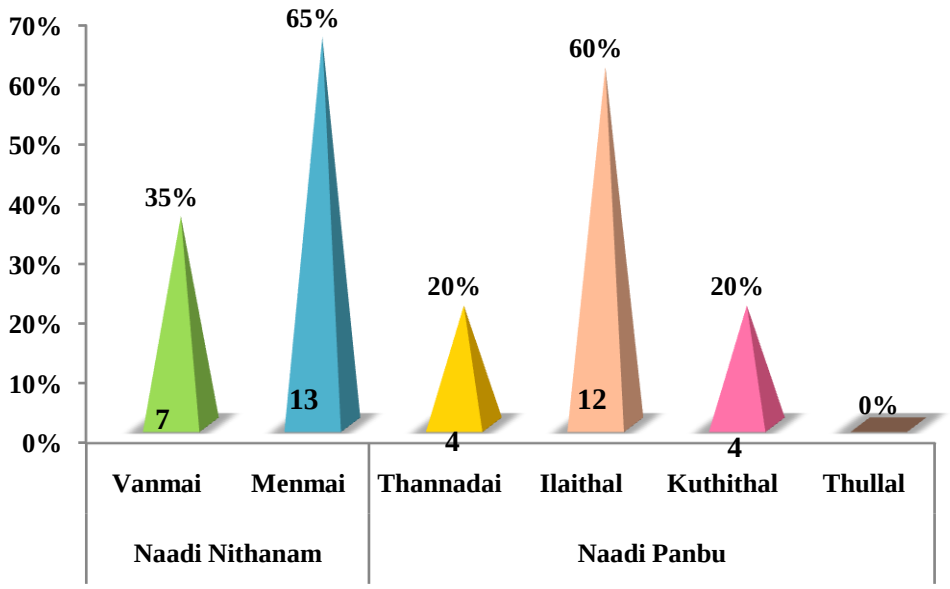


Figure 21. Naadi Nithanam & Panbu

OBSERVATION

Among 20 cases, 13 cases were Menmai and 7 cases (35%) were Vanmai in Naadi Nithanam. Out of 20 cases, 12 cases (60%) were Ilaithal in Naadi Panbu, each 4 cases (20%) were Thannadai and Kuthithal in Naadi Panbu.

INFERENCE

In this study most of the cases were Menmai in Naadi Nithanam and Ilaithal in Naadi Panbu.

11.20. Sparisam

Mei kuri		No. of cases	Percentage %
Veppam	Mitham	17	75
	Migu	2	10
	Thatpam	1	5
	Total	**20**	**100**
Viyarvai	Iyalbu	18	90
	Athigam	2	10
	Total	**20**	**100**
Thanmai	Thoduvali	0	0
	Udalvaratchi	0	0
	Iyalbu	20	100
	Total	**20**	**100**

Table 20. Sparisam

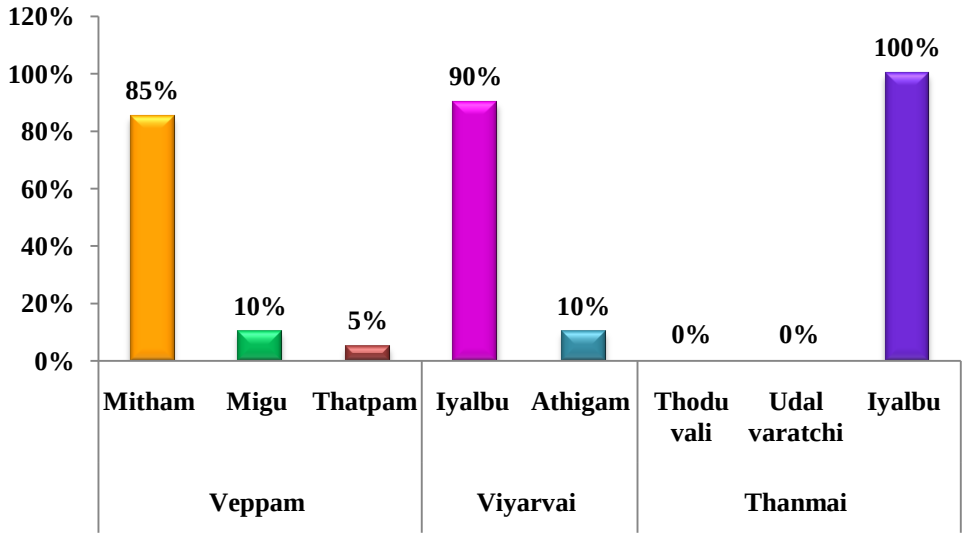


Figure 22. Sparisam

OBSERVATION

Among 20 cases, 17 cases (85%) had mithavepppam in meikuri, 2 cases (10%) had miguveppam and 1 case (5%) had Thatpam in maikuri. In viyarvai 18 cases (90%) had normal sweating, 2 cases (10%) had excess sweating. In thoduvali all the cases had no tenderness.

INFERENCE

In this study most of the cases had mithaveppam, normal sweating and no tenderness.

11.21 Malam

Malam		No. of cases	Percentage %
Niram	Karuppu	0	0
	Manjal	19	95
	Sivappu	1	5
	Total	**20**	**100**
Thanmai	Mala sikkal	0	0
	Siruthal	11	55
	Kazhichal	20	100
	Seetham	19	95
	Vemmai	1	5
	Habitual constipation	6	30
	Mucus	19	95
	Blood	17	85

Table 21. Malam

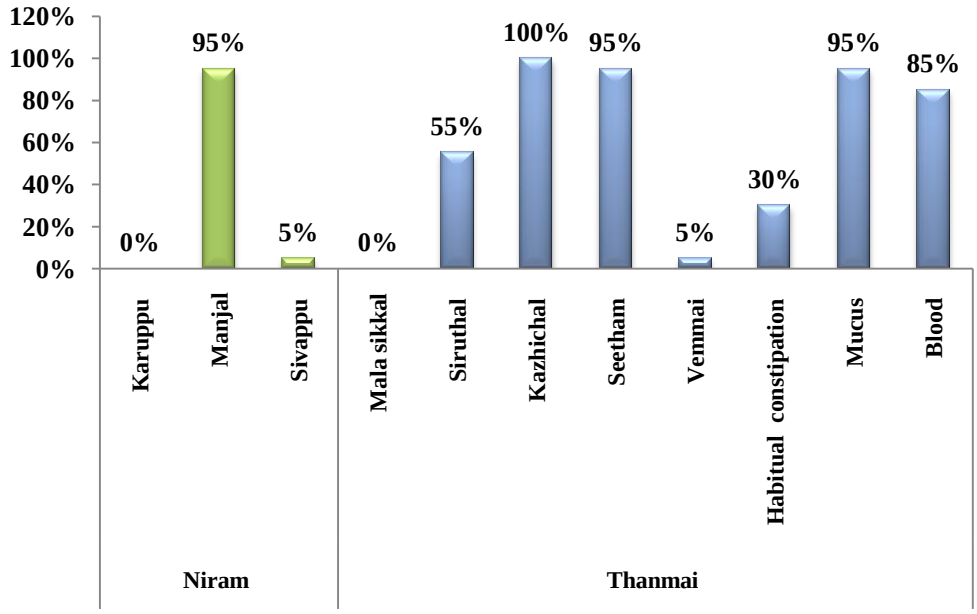


Figure 23. Malam

OBSERVATION

Among 20 cases, 19 cases (95%) were Yellow color stools. 1 case (5%)was red color stool. 11 cases(55%) were Siruthal, 20 cases (100%) were kazhichal, 6 (30%) cases had habitual constipation, 19 cases (95%) were Seetham present, 1 case (5%) had Vemmai present, 19 cases (95%) had Mucus present and 17 (75%) cases had Blood present in stools.

INFERENCE

In this study majority of the cases had Yellow color stools. All the cases had kazhichal and majority of the cases had seetham, mucus and blood present in the stools.

11.22 Neer Kuri

Neer Kuri		No.of cases	Percentage %
Neer Thanmai	Neer Manam (Ammonical)	20	100
	Fruity	0	0
	Total	**20**	**100**
Neer Niram	Yellow	10	50
	Pale yellow	4	20
	Colourless	5	25
	Straw colour	1	5
	Total	**20**	**100**
Nurai	Absent	20	100
	Present	0	0
	Total	20	100
Edai	Iyalbu	20	100
	Total	**20**	**100**
Enjal	Iyalbu	20	100
	Athigam	0	0
	Total	**20**	**100**
Neikuri	Muthu	8	40
	Mellenaparaval	1	5
	Sieve	7	35
	Coin	2	10
	Round	2	10
	Total	**20**	**100**

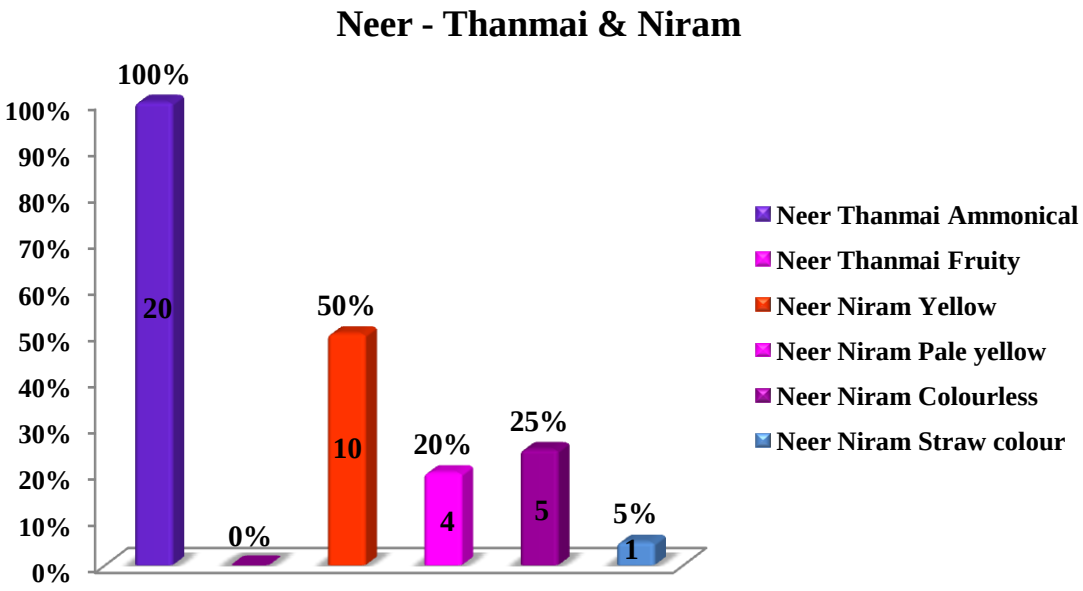


Figure 24. Neer- Thanmai & Niram

OBSERVATION

Among the 20 cases, 20 cases (100%) had mild aromatic in Neermanam, 10 cases (50%) had yellow color urine, 4 cases (20%) had Pale yellow color urine, 5 cases (25%) had colorless urine and 1 case (5%) had Straw yellow color urine.

INFERENCE

In this study majority of the cases had yellow color urine with mils aromatic odour

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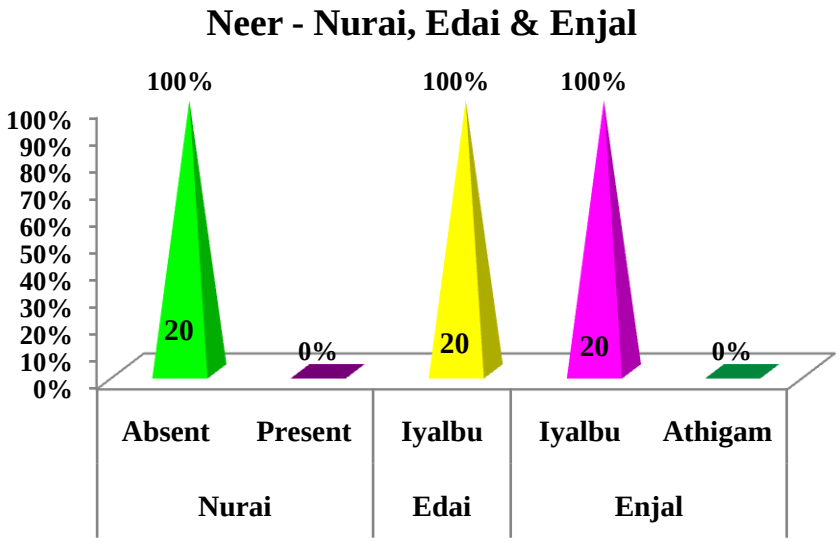


Figure 25. Neer – Nurai, Edai, & Enjal

OBSERVATION

Among 20 cases, all the cases (100%) had normal deposits in urine, normal density in urine and no froth present in urine.

INFERENCE

In this study majority of the cases had normal deposits, normal density and no froth present in urine.

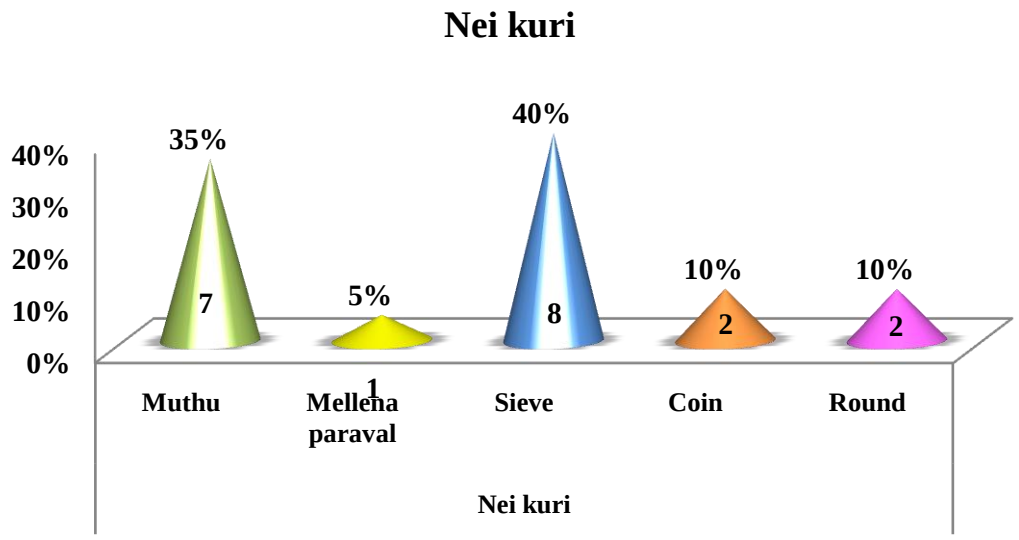


Fig. 26 Nei kuri

OBSERVATION

Out of 20 cases, 1 case (5%) had slow spread, 2 cases (10%) had coin spread, 2 cases (10%) had Round spread, 8 cases (40%) had Sieve spread and 7 cases (35%) had Pearl spread.

INFERENCE

In Neikuri majority of the cases had Pearl spread.

11.23. Manikkadai Nool

Manikkadai Nool	No. of cases	Percentage %
8 ½	1	5
8 ¾	1	5
9	4	20
9 ¼	0	0
9 ½	6	30
9 ¾	2	10
10	4	20
10 ¼	0	0
10 ½	2	10
10 ¾	0	0
11	0	0
Total	**20**	**100**

Table 23. Manikkadai Nool

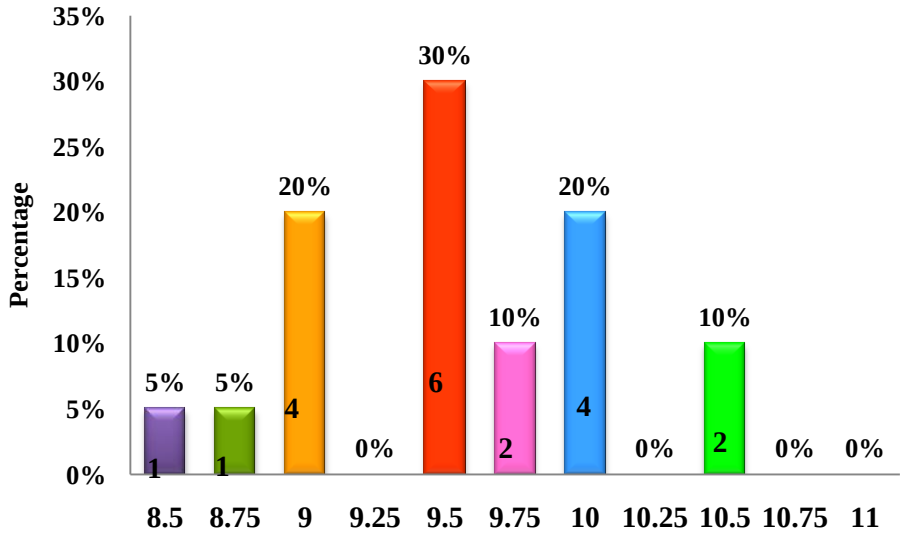


Fig. 27. Manikkadadai Nool

OBSERVATION

Among 20 cases, 6 cases (30%) were 91/2 finger breadth, 4 cases (20%) cases were 93/4 finger breadth, 4 cases (20%) were 10 finger breadth, 2 cases (10%) were 93/4 finger breadth, 2 cases (10%) were 101/2 finger breadth, 1 case (5%) was 81/2 finger breadth, 1 case (5%) was 83/4 finger breadth.

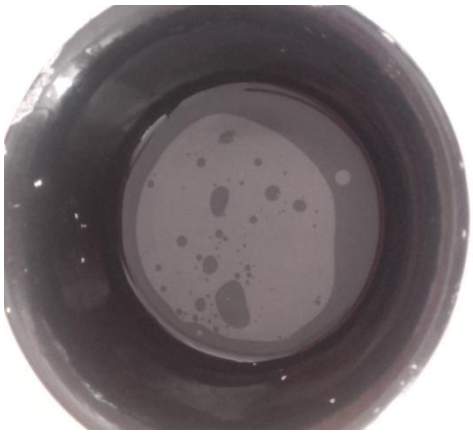
INFERENCE

Majority of the 6 cases were 91/2 finger breadth in Manikkadainool. As per siddha text, there is no indication for VanniPitham. Therefore the patients with the range of 9/12-10 wrist circumetric finger breadth may be referred to have a predilection to develop VanniPitham. Such people may be advised to follow the precautionary steps to avoid the development of VanniPitham as preventive measure.

NEERKURI AND NEIKURI EXAMINATION

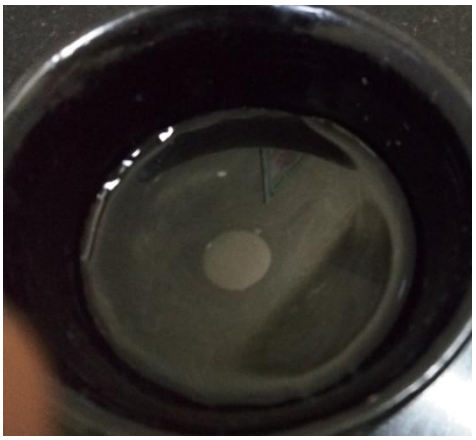
NEERKURI **NEIKURI**

CASE NO 1 : K715633



CASE NO 2 : : J58585

CASE NO 3 : I53511



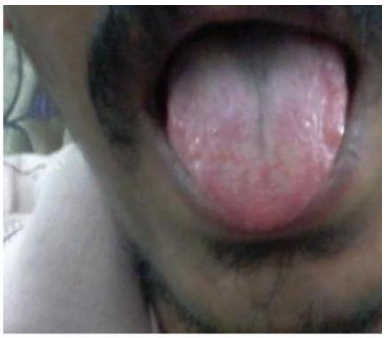
VIZHI & NAA EXAMINATION

Normal eye

Normal tongue

Pallor eye

Coated tongue



Black spotted tongue

12. DISCUSSION

Vanni Pitham is described in Sage Yugi in Yugi Vaithya Chinthamani – 800 and may be correlated with inflammatory bowel disease. The author had screened 60 patients with complaints of frequent diarrhoea in the outpatient Department of National Institute of Siddha. Among those 60 cases, 20 cases were enrolled in the study and observed for symptoms and signs.

Distribution of cases by Age group

Out of 20 cases 7 cases (35%) fell under the group of 20-30 years of age, 3cases (15%) fell under group of 31-40 years of age, 4 cases (20%) fell under the group of 41-50 years of age, 4 cases (20%) fell under the group of 51-60 years of age, and 2 cases (10%) fell under the group of 61-70 years of age. In this study the maximum number of cases (35%) fell under 20-30 years age group. This shows that the prevalence of Vanni Pitham is most in men of adolescent 20+ age categories.

Distribution of cases by Diet:

Among 20 cases 19 (95%) cases were being non vegetarian and 1 (5%) case was being vegetarian. Most of them were non vegetarians because non vegetarians are more prevalent in general population. Non-vegetarian diet which is considered as Thamo Gunam. Food seems to alter the body, mind and soul.

Distribution of cases by Paruvakaalam:

Among 20 cases 7 cases (35%) had affected at Elavenil kaalam, 6 cases (30%) had affected at Pinpani kaalam, 3 cases (15%) had affected at Muthu venil kaalam, 2 cases (10%) had affected at Koothir kaalam, One of each cases had affected at Kaar kaalam and Munpani kaalam. The occurrence of disease was mostly during Elavenil Kaalam (Chithirai,Vaigasi).

As per the text Maruthuva Thani Padal, In Elavenil Kaalam (Chithirai,Vaigasi), Kabam gets Vetru Nilai Valarchi and produce increased mucus which leads to anorexia and cause related diseases. It is more over correlate to some of the symptoms of Vanni Pitham such as mucus discharge and anorexia which may be due to the affected Kabam during this season.

Distribution of cases by Thinai :

Out of 20 cases 19 cases (95%) had affected in Marutha Nilam, 1 case (5%) was affected in Kurinji Nilam.

As per the text Padhartha Guna Chinthamani, Marutham is the land for human survival without any diseases and the deranged humours also become normal. But most of the cases reported in this study were residing in Marutha Nilam that may be due to modified lifestyle of the people and polluted land and its surroundings.

Distribution of cases by Clinical features:

Out of 20 cases, all the 20 cases (100%) had the symptoms of Abdominal discomfort, Bloody diarrhea with mucus, 18 cases (90%) had the symptoms of Dizziness and anorexia, 10 cases (50%) had Paleness of the body, 5 cases (25%) had Sour taste of the tongue, 3 cases (15%) had Fever.

In this study the cases were included as per the symptoms given in Siddha literature. Even nowadays the same symptoms were reported by the patients in outpatient department of National Institute of Siddha.

Distribution of cases by Gnanenthiriyangal:

Among 20 cases, Naakku affected for 5 cases (25%) resulting sour taste of the tongue. According to Siddha Literature, tongue is composed of Neer Bootham and it feels taste.

Distribution of cases by Kanmentheriyangal:

In Kanmentheriyangal, Eruvaai affected for all the 20(100%) cases due to bloody diarrhoea with mucus. According to Siddha Literature, Eruvaai is the dwelling place of Neer Bootham, and helps in evaquation of fecal matter.

Distribution of cases by Dasanaadigal:

In Naadi, Kugu affected. Kugu affected resulting in bloody diarrhoea with mucus. According to Siddha Literature, Kugu dwells in the place of Abanan.

Distribution of cases by Uyir Thathukkal:

Derangement inVatha kutram

Out of 20 cases, all the cases (100%) had derangement in Abanan, Samanan, Viyanan and Devathathan. The Abanan which is responsible for the downward movement, affected resulting in the abnormality of excretory function i.e bloody diarrhea with mucus and Viyanan due to abnormality in the abdominal movements. Samanan is

responsible for neutralization of other 4 vali. It affected because derangement of other vali. The Devathathan produce tiredness of the body. 2 cases (10%) had derangement in Uthanan.

Derangement in Pitha kutram

Out of 20 cases, all the cases (100%) had derangement in Saathaga Pitham, Saathagam is the fire of energy to do work, it affects and resulting unable to do work during bloody diarrhoea with mucus.10 cases (50%) had derangement in Ranjaga Pitham, 4 cases (20%) had derangement in Anala Pitham. Analagam is the fire for digestion, it gets affected and resulting in anorexia, Ranjagam is the fire promoting blood, it affects and resulting in anemia.

Derangement in Kaba kutram:

Out of 20 cases, 18 cases (90%) had derangement in Kilethagam. Kilethagam is located in stomach, it affects and resulting in anorexia. 4 cases (20%) had derangement in Santhigam due to joint pain.

Distribution of cases by Udal Thathukkal:

Among the seven somatic components of 20 cases, all the 20 cases (100%) had affected Saaram and Senneer. Derangement of Udal thathukkal is the initial stage for any diseases. In this study Saaram (Migu gunam) and Senneer (Migu gunam, Kurai gunam) affected in the patients of Vanni Pitham it leads to Anorexia, Paleness (anaemia), sour taste if the tongue and which may be a significant finding in Udal Thathukkal. The vitiation of Saaram hands down its reflections over Senneer. 11 cases (55%) had affected Oon, 8 cases (40%) had affected Kozhuppu, 7 cases (35%) had affected Enbu.

Distribution of cases by Kosangal:

Among 20 cases, 100% cases got deranged Annamaya kosam resulting in anorexia. As per the literature, Annamaya kosam is affected because of 7 Udal thathukkal forming the kosam is affected. 100% cases got deranged Manomaya kosam got deranged resulting in stress.

Distribution of cases by Udaliyal:

Among the 20 cases, 11 cases (55%) were vathapitham, 4 cases (20%) were vathakabam, 3 cases (15%) cases were kabavatham, each one cases were pitha vatham and pitha kabam. The observation results showed that Vatha Thontha temperament patients were more prone to the disease Vanni Pitham.

Distribution of cases by Thegiyin niram:

Out of 20 cases, 10 cases (50%) were of dark complexion, 6 cases (30%) were of yellowish complexion and 4 cases (20%) were of pale complexion. As most of the Indians are darkness in color, 50% of cases found to be darkish. No specific inference could be made out in this study from the examination of Niram.

Distribution of cases by Naadi:

Out of 20 cases, 9 cases (45%) had Pithavatham, 5 cases (25%) had Vathapitham, 5 cases (25%) had Pithakabam, 1 case (5%) had Kabapitham. In this study most of the cases had Pithavatha naadi in nature. As per the literature, it is stated that Pithavatha naadi is involved in Moola vaayu, In this study also most of the cases had Pithavatha naadi. From this it is concluded that Pithavatha naadi may be prominent in Vanni Pitham Patients.

Among 20 cases, 13 cases were Menmai and 7 cases (35%) were Vanmai in Naadi Nithanam. Out of 20 cases, 12 cases (60%) were Ilaithal in Naadi Panbu, each 4 cases (20%) were Thannadai and Kuthithal in Naadi Panbu.

Distribution of cases by Sparisam:

Among 20 cases, 17 cases (85%) had mitha vepppam in meikuri, 2 cases (10%) had migu veppam and 1 case (5%) had Thatpam in meikuri. In viyarvai 18 cases (90%) had normal sweating, 2 cases (10%) had excess sweating. In thoduvali all the cases had no tenderness.

Distribution of cases by Naa

Among 20 cases, 3 cases (15%) had coated tongue, 4 cases (20%) had fissured tongue, 13 cases (65%) had normal tongue.

Among 20 cases, 4 cases (20%) had yellow pigmented tongue, 4 cases (20%) had normal tongue, 12 cases (60%) had Pallor tongue. In this study majority of cases had Pallor tongue due to anemia which is one of the clinical symptom of Vanni Pitham.

In 20 cases, 2 cases (10%) were sweet taste, 7 cases (35%) were sour taste, 11 cases were normal taste of the tongue. In this study most of the cases, had no specific taste felt in the tongue. No specific inference could be made from this. In 20 cases 1 case (5%) had excessive salivation, 19 cases (95%) had normal salivation.

Distribution of cases by Mozhi

Out of 20 cases 5 cases (25%) had low pitched voice, 15 cases (75%) had middle pitched voice. As per the Siddha Literature, patients of Vatha diseases have medium pitched voice. In this study majority of cases had medium pitched voice. No specific inference could be made from this.

Distribution of cases by Vizhi:

Among 20 cases, 7 cases (35%) were Veluppu in Vizhiyin Niram, 13 cases had normal in Vizhiyin niram, 5 cases (25%) had kan erichal and 15 cases (75%) were normal in Vizhiyin thanmai. No specific inference could be made from this.

Distribution of cases by Malam:

Among 20 cases, 19 cases (95%) were Yellow color stools. 1 case (5%)was red color stool. 11 cases(55%) were Siruthal, 20 cases (100%) were kazhichal, 6 (30%) cases had habitual constipation, 19 cases (95%) were Seetham present, 1 case (5%) had Vemmai present, 19 cases (95%) had Mucus present and 17 (75%) cases had Blood present in stools. In this study majority of the cases had yellow coloured stools with blood and mucus was present, which is one of the clinical symptoms of Vanni Pitham.

Distribution of cases by Neerkuri:

Among the 20 cases, 20 cases (100%) had mild aromatic in Neer manam, 10 cases (50%) had yellow color urine, 4 cases (20%) had Pale yellow color urine, 5 cases (25%) had colorless urine and 1 case (5%) had Straw yellow color urine. Among 20 cases, all the cases (100%) had normal deposits in urine, normal density in urine and no froth present in urine.

Distribution of cases by Neikuri:

Out of 20 cases, 1 case (5%) had slow spread, 2 cases (10%) had coin spread, 2 cases (10%) had Round spread, 8 cases (40%) had Sieve spread and 7 cases (35%) had Pearl spread.

In this study majority of cases had sieve pattern. According to Siddha literature, sieve pattern is the sign for the disease which may or may or may not be curable. The disease Vanni Pitham that may be correlated with inflammatory bowel disease, which is relapsing and remitting in nature even after medication. So it may not be curable completely.

Distribution of cases by Manikkadai Nool:

Among 20 cases, 6 cases (30%) were 91/2 finger breadth, 4 cases (20%) cases were 9 finger breadth, 4 cases (20%) were 10 finger breadth, 2 cases (10%) were 93/4 finger breadth, 2 cases (10%) were 101/2 finger breadth, 1 case (5%) was 81/2 finger breadth, 1 case (5%) was 83/4 finger breadth.

Majority of the 6 cases were 91/2 finger breadth in Manikkadai Nool. As per siddha text, there is no indication for Vanni Pitham. Therefore the patients with the range of 9/12-10 wrist circumetric finger breadth may be referred to have a predilection to develop Vanni Pitham. Such people may be advised to follow the precautionary steps to avoid the development of Vanni Pitham as preventive measure.

Distribution of cases by laboratory investigations & colonoscopy report:

Among 20 cases, 3 cases (15%) had colonoscopy report with inflammatory changes in large intestine. The colonoscopy report was significant for the disease Vanni Pitham. Others were not willing for the colonoscopic investigation due to fear.

In routine hematology, 90% of the cases had elevated erythrocyte sedimentation rate level. In 90% of cases had decreased hemoglobin level due to bloody diarrhoea with mucus.

Among 20 cases, 3 cases (15%) had colonoscopy report with inflammatory changes in large intestine. The colonoscopy report was significant for the disease Vanni Pitham. Others were not willing for the colonoscopic investigation due to fear.

All the signs and symptoms mentioned by Yugimuni about Vanni Pitham are found in the cases of inflammatory bowel disease consistently, colonoscopy reports of some cases were recorded with inflammatory changes in intestine. Therefore the diagnosis inflammatory bowel disease may considered equivalent to that of Vanni Pitham mentioned in Yugi Vaithiya Chinthamani – 800.

13. SUMMARY AND CONCLUSION

Vanni Pitham a clinical entity was described by Sage Yugi in his wisdom. The study conducted has come out with excellent results validating the clinical features of Vanni Pitham elucidated in an ultra short poetic segment by Yugi. The study was aimed at evolving a set of exclusive Siddha diagnostic findings for Vanni Pitham with the observation and inference of various parameters like Naadi, Neikkuri and disease acquired season, it can be concluded that all of them point to the development or vitiation of humour leading to the disease Vanni Pitham. The patient reported with the symptoms of Vanni Pitham were subjected to the standard set of investigations, the results and findings of the investigations were suggestive of Vanni Pitham according to modern classification of disease. Manikkadai Nool and Nei kuri findings may help in the identifying of preponderance in a person to develop Vanni Pitham, hence it can be used as a screening measure to advise the preventive measures well in advance. Almost the patients who diagnosed as Vanni Pitham had significant study of colonoscopy evidence conforming to the correlation of disease with inflammatory bowel disease. From the analysis done between Vanni Pitham cases and control group, notable variations were observed in both Siddha and Modern parameters. Interestingly, it was found that the symptoms presented by the patients in the study were those of a constant subset of symptoms of inflammatory bowel disease explained in the present day classification. It correlated with all of the symptoms mentioned by Yugi muni under Vanni Pitham. Thus the author concludes by throwing lights on validation of symptomatology and exclusive Siddha diagnostic methodology for Vanni Pitham so that a physician can arrive at proper treatment procedures by rightly diagnosing the disease.

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ANNEXURE - I

A STUDY ON THE SYMPTAMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

FORM I - SCREENING AND SELECTION PROFORMA

1. O.P.No _____ 2. I.P No _____ 3. Bed No: _____ 4. S.No: _____

5. Name: _____6. Age (years): ☐ 7. Gender: M ☐ F ☐ T ☐

8. Occupation: _____ 9. Income: _____

10. Address: .....

.....

.....

11. Contact Nos: ----------

12. E-mail : ----------

13. Whether taken any other medication for the same disease previously YES ☐ NO ☐

If yes,
Name of the medicines :

Duration :

If resorted to Siddha medicine for the treatment of Vanni Pitham YES ☐ NO ☐

Reasons for resorting to Siddha medicine :

	YES	NO
(a) Cost effectiveness :	☐	☐
(b) No side effects in Siddha medicine :	☐	☐
(c) Dissatisfaction with the previous treatment :	☐	☐

INCLUSION CRITERIA

	YES	NO
1. Age 15-70yrs.	☐	☐
2. Abdominal discomfort	☐	☐
3. Fever	☐	☐
4. Bloody diarrhoea with mucus	☐	☐
5. Paleness (Anemia)	☐	☐
6. Dizziness	☐	☐
7. Anorexia	☐	☐
8. sour taste	☐	☐

Patients who are fulfill any 4 symptoms in the criteria will be included in the study.

EXCLUSION CRITERIA	YES	NO
1. Severe systemic illness	☐	☐
2. Vulnerable group	☐	☐
3. Malignancies	☐	☐

Date : **P.G Student** **Lecturer**

ANNEXURE – II

A STUDY ON THE SYMPTAMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

FORM II - HISTORY PROFORMA

1. Sl.No of the case: _____

2. Name: _____ Height: _____ cms Weight: _____ Kg

3. Age (years): _____ DOB ☐☐ ☐☐ ☐☐☐☐
D D M M Y E A R

4. Educational Status:

1) Illiterate ☐ 2) Literate ☐ 3) Student ☐ 4) Graduate/Postgraduate ☐

5. Nature of work:

1) Sedentary work ☐

2) Field work with physical labour ☐

3) Field work Executive ☐

6. Complaints and Duration:

_____

_____

_____

_____

_____

7. History of present illness:

_____

_____

_____

8. History of Past illness:

	1. Yes	2. No
Systemic hypertension	☐	☐
Ischemic heart disease	☐	☐
Dyslipidaemia	☐	☐
Jaundice	☐	☐
Bronchial asthma	☐	☐
Any drug allergy	☐	☐
Any surgeries	☐	☐
Any major illnesses	☐	☐

9.Habits:

	1. Yes	2. No
Smoker	☐	☐
Alcoholic	☐	☐
Drug Addiction	☐	☐
Betel nut chewer:	☐	☐
Tea	☐	☐
Coffee	☐	☐
Milk	☐	☐

DIET HISTORY

Type of diet V ☐ NV ☐ M ☐

VEGETARIAN FOODS	1. Yes	2. No
Sweets	☐	☐
Ice creams	☐	☐
Junk foods	☐	☐

NON VEGETARIAN FOODS

Meat	☐	☐
Fish	☐	☐
Crab	☐	☐

DRINKS

Soft drinks	☐	☐

10. Personal history:

Marital status: Married ☐ Unmarried ☐

No. of children: Male: _____ Female: _____

Socio economic status:

11. Family history:

History of Inflammatory bowel disease --

12.. Menstrual & Obstetrichistory:

Age at menarche _____ years

Gravidity ☐ Parity ☐

Duration of the menstrual cycle:

Constancy of cycle duration: 1.Regular ☐ 2.Irregular ☐

13. GENERAL ETIOLOGY FOR **"VANNI PITHAM"**:

	YES	NO
1. Altered GIT motility	☐	☐
2. Food habit	☐	☐
3. Psychological disturbance	☐	☐

14. CLINICAL SYMPTOMS OF **"VANNI PITHAM**"

	YES	NO
Abdominal discomfort	☐	☐
Fever	☐	☐
Bloody diarrhoea with mucus	☐	☐
Paleness (Anemia)	☐	☐
Dizziness	☐	☐
Anorexia	☐	☐
Sour taste	☐	☐

Date : **P.G Student** **Lecturer**

ANNEXURE - III

A STUDY ON THE SYMPTAMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

FORM III - CLINICAL ASSESSMENT

1. Serial No: ________

2. Name: _________________

3. Date of birth: | | | | | | | | | | |
D D   M M   Y E A R

4. Age: _______ years

5. Date: ___________

GENERAL EXAMINATION:

1. Height: ________ cms. BMI ______ (Weight Kg/ Height m2)
2. Weight (kg):
3. Temperature (°F):
4. Pulse rate:
5. Heart rate:
6. Respiratory rate:
7. Blood pressure:
8. Pallor:
9. Jaundice:
10. Cyanosis:
11. Lymphadenopathy:
12. Pedal edema:
13. Clubbing:
14. Jugular vein pulsation

EXAMINATION

1. Inspection

2. Palpation

3. Percussion

4. Auscultation

VITAL ORGANS EXAMINATION

	1. Normal	2. Affected	
1. Heart	☐	☐	_____
2. Lungs	☐	☐	_____
3. Brain	☐	☐	_____
4. Liver	☐	☐	_____
5. Kidney	☐	☐	_____
6. Spleen	☐	☐	_____
7. Stomach	☐	☐	_____

SYSTEMIC EXAMINATION:

1. Cardio Vascular System _____

2. Respiratory System _____

3. Gastrointestinal System _____

4. Central Nervous System _____

5. Uro genital System _____

6. Endocrine System _____

[1] ENVAGAI THERVU [EIGHT-FOLD EXAMINATION]

I. NAADI (KAI KURI) (RADIAL PULSE READING)

(a) Naadi Nithanam (Pulse Appraisal)

1. Kalam (Pulse reading season)

1. Kaarkaalam (Rainy season)	☐	2.Koothirkaalam (Autumn)	☐
3. Munpanikaalam (Early winter)	☐	4.Pinpanikaalam (Late winter)	☐
5. Ilavenirkaalam (Early summer)	☐	6.Muthuvenirkaalam (Late summer)	☐

2. Desam (Climate of the patient's habitat)

1. Kulir (Temperate) ☐ 2. Veppam (Hot) ☐

3. Vayathu (Age) 1. 1-33yrs ☐ 2. 34-66yrs ☐ 3. 67-100 ☐

4. Udal Vanmai (General body condition)

1. Iyyalbu (Normal built) ☐ 3. Valivu (Robust) ☐ 4.Melivu (Lean) ☐

5. Vanmai (Expansile Nature)

1. Vanmai ☐ 2.Menmai ☐

6. Panbu (Habit)

1. Thannadai (Playing in) ☐ 2. Puranadai (Playing out) ☐ 3.Illaitthal (Feeble) ☐

4. Kathithal (Swelling) ☐	5.Kuthithal (Jumping) ☐	6.Thullal (Frisking) ☐
7. Azhutthal (Ducking) ☐	8. Padutthal (Lying) ☐	9. Kalatthal (Blending) ☐
10. Munnokku (Advancing) ☐	11. Pinnokku (Flinching) ☐	12. Suzhalal (Revolving) ☐
13. Pakkamnokku (Swerving) ☐		

(b) Naadi nadai (Pulse Play)

1. Vali ☐	2. Azhal ☐	3. Iyyam ☐
4. Vali Azhal ☐	5. Azhal Vali ☐	6. Iyya Vali ☐
7. Vali Iyyam ☐	8. Azhal Iyyam ☐	9. Iyya Azhal ☐

II.NAA (TONGUE)

1. Maa Padinthiruthal (Coatedness)	1. Present ☐	2. Absent ☐	
2. Niram (Colour)	1.Karuppu (Dark) ☐	2. Manjal (Yellow) ☐	3. Velluppu (Pale) ☐
3. Suvai (Taste sensation)	1.Pulippu (Sour) ☐	2. Kaippu (Bitter) ☐	3. Inippu (Sweet) ☐
4. Vedippu (Fissure)	1. Absent ☐	2. Present ☐	
5. Vai neer ooral (Salivation)	1.Normal ☐	2. Increased ☐	3.Reduced ☐

III.NIRAM (COMPLEXION)

1. Karuppu (Dark) ☐	2.Manjal (Yellowish) ☐	3.Velluppu (Fair) ☐

IV. MOZHI (VOICE)

1. Sama oli (Medium pitched) ☐	2 Urattha oli (High pitched) ☐	3.Thazhantha oli (Low pitched) ☐

V. VIZHI (EYES)

1. Niram (Venvizhi)
(Discolouration)

1. Karuppu (Dark) ☐ 2. Manjal (Yellow) ☐

3. Sivappu (Red) ☐ 4.Velluppu (White) ☐

5. No Discoloration ☐

2. Kanneer (Tears) 1.Normal ☐ 2. Increased ☐ 3.Reduced ☐

3. Erichchal (Burning sensation) 1.Present ☐ 2. Absent ☐

4. Peelai seruthal (Mucus excrements) 1.Present ☐ 2. Absent ☐

VI. MEI KURI (PHYSICAL SIGNS)

1. Veppam (Warmth) 1. Mitham (Mild) ☐ 2. Migu (Moderate) ☐ 3. Thatpam (Low) ☐

2. Viyarvai (Sweat) 1. Increased ☐ 2. Normal ☐ 3. Reduced ☐

3. Thodu vali (Tenderness) 1. Absent ☐ 2. Present ☐

VII. MALAM (STOOLS)

1. Niram (Color) 1. Karuppu (Dark) ☐ 2. Manjal (Yellowish) ☐

3. Sivappu (Reddish) ☐ 4. Velluppu (Pale) ☐

2. Sikkal (Constipation) 1. Present ☐ 2. Absent ☐

3. Sirutthal (Poorly formed stools) 1. Present ☐ 2. Absent ☐

4. Kalichchal (Loose watery stools) 1. Present ☐ 2. Absent ☐

5. Seetham (Watery and mucoid excrements) 1. Present ☐ 2. Absent ☐

6. Vemmai (Warmth) 1. Present ☐ 2. Absent ☐

7. History of habitual constipation 1. Present ☐ 2. Absent ☐

8. Passing of a) Mucous 1. Yes ☐ 2. No ☐

b) Blood 1. Yes ☐ 2. No ☐

VIII. MOOTHIRAM (URINE)

(a) NEER KURI (PHYSICAL CHARACTERISTICS)

1.Niram (colour)

(Colourless)	☐	Milky purulent	☐	orange	☐
Red	☐	Greenish	☐	dark brown	☐
Bright red	☐	Black	☐	Brown red or yellow	☐

2. Manam (odour)		Yes	No
Ammonical	:	☐	☐
Fruity	:	☐	☐
Others	: _____		

3. Edai (Specific gravity)		Yes	No
Normal (1.010-1.025)	:	☐	☐
High Specific gravity (>1.025)	:	☐	☐
Low Specific gravity (<1.010)	:	☐	☐
Low and fixed Specific gravity (1.010-1.012):		☐	☐

4. Alavu(volume)

		Yes	No
Normal (1.2-1.5 lt/day)	:	☐	☐
Polyuria (>2lt/day)	:	☐	☐
Oliguria (<500ml/day)	:	☐	☐

5. Nurai(froth)

		Yes	No
Clear	:	☐	☐
Cloudy	:	☐	☐

6. **Enjal (deposits)** : Yes ☐ No ☐

(b) NEI KURI (oil spreading sign)

1. Aravam (Serpentine fashion)	☐	2. Mothiram (Ring)	☐
3. Muthu (Pearl beaded appear)	☐	4. Aravil Mothiram (Serpentine in ring fashion)	☐
5. Aravil Muthu (Serpentine and Pearl patterns)	☐	6. Mothirathil Muthu (Ring in pearl fashion)	☐
7. Mothirathil Aravam (Ring in Serpentine fashion)	☐	8. Muthil Aravam (Pearl in Serpentine fashion)	☐
9. Muthil Mothiram (Pearl in ring fashion)	☐	10. Asathiyam (Incurable)	☐
11. Mellena paraval (Slow spreading)	☐		

12. others:_____

[2]. MANIKADAI NOOL (Wrist circummetric sign) : _____ fbs

[3]. **IYMPORIGAL /IYMPULANGAL**

(Penta sensors and its modalities)

	1. Normal	**2. Affected**
1. Mei (skin)	☐	☐
2. Vaai (Mouth/ Tongue)	☐	☐
3. Kan (Eyes)	☐	☐
4. Mookku (Nose)	☐	☐
5. Sevi (Ears)	☐	☐

[4]. KANMENTHIRIYANGAL /KANMAVIDAYANGAL
(Motor machinery and its execution)

	1. Normal	**2. Affected**
1. Kai (Hands)	☐	☐
2. Kaal (Legs)	☐	☐
3. Vaai (Mouth)	☐	☐
4. Eruvai (Analepy)	☐	☐
5. Karuvaai (Birth canal)	☐	☐

[5]. YAKKAI (SOMATIC TYPES)

Vatha constitution	Pitha constitution	Kaba constitution
Lean and lanky built ☐	Thin covering of bones and joints by soft tissue ☐	Plumpy joints and limbs ☐
Hefty proximities of limbs ☐	Always found with warmth, sweating and offensive body odour ☐	Broad forehead and chest ☐
Cracking sound of joints on walking ☐	Wrinkles in the skin ☐	Sparkling eyes with clear sight ☐
Dark and thicker eye lashes ☐	Red and yellow admixed complexion ☐	Lolling walk ☐
Dark and light admixed complexion ☐	Easily suffusing eyes due to heat and alcohol ☐	Immense strength despite poor eating ☐
Split hair ☐	Sparse hair with greying ☐	High tolerance to hunger, thirst and fear ☐
Clear words ☐	Intolerance to hunger, thirst and heat ☐	Exemplary character with good memory power ☐
Scant appetite for cold food items ☐	Inclination towards perfumes like sandal ☐	More liking for sweet taste ☐
Poor strength despite much eating ☐	Slender eye lashes ☐	Husky voice ☐
Loss of libido ☐	Pimples and moles are plenty ☐	
In generosity ☐		
Sleeping with eyes half closed ☐		

RESULTANT SOMATIC TYPE: _____

[6] GUNAM

1. Sathuva Gunam ☐
2. Rajo Gunam ☐
3. Thamo Gunam ☐

[7] UYIR THATHUKKAL

A. VALI

	1. Normal	2. Affected
1. Praanan (Heart centre)	☐	☐
2. Abaanan (Matedial of muladhar centre)	☐	☐
3. Samaanan (Navel centre)	☐	☐
4. Udhaanan (Forehead centre)	☐	☐
5. Viyaanan (Throat centre)	☐	☐
6. Naahan (Higher intellectual function)	☐	☐
7. Koorman (Air of yawning)	☐	☐
8. Kirukaran (Air of salivation)	☐	☐
9. Devathathan (Air of laziness)	☐	☐
10. Dhananjeyan (Air that acts on death)	☐	☐

B. AZHAL

	1. Normal	2. Affected
1. Anala pittham (Gastric juice)	☐	☐
2. Prasaka pittham (Bile)	☐	☐
3. Ranjaka pittham (Haemoglobin)	☐	☐

4. Aalosaka pittham (Aqueous Humour) ☐ ☐

5. Saathaka pittham (Life energy) ☐ ☐

C. IYYAM

	1. Normal	**2. Affected**
1. Avalambagam (Serum)	☐	☐
2. Kilethagam (saliva)	☐	☐
3. Pothagam (lymph)	☐	☐
4. Tharpagam (cerebrospinal fluid)	☐	☐
5. Santhigam (Synovial fluid)	☐	☐

[8] UDAL THATHUKKAL

INCREASED SAARAM (CHYLE)		DECREASED SAARAM(CHYLE)	
Loss of appetite	☐	Loss weight	☐
Excessive salivation	☐	Tiredness	☐
Loss of perseverance	☐	Dryness of the skin	☐
Excessive heaviness White musculature	☐	Diminished activity of the sense organs	☐
Cough, dysponea, excessive sleep	☐		
Weakness in all joints of the body	☐		

A. SAARAM: INCREASED ☐ DECREASED ☐

INCREASED CENNEER(BLOOD)		DECREASED CENNEER(BLOOD)	
Boils in different parts of the body	☐	Anemia	☐
Anorexia	☐	Tiredness	☐
Mental disorder	☐	Neuritis	☐
Spleenomegaly	☐	Lassitude	☐
Colic pain	☐	Pallor of the body	☐
Increased pressure	☐		
Reddish eye and skin	☐		
Jaundice	☐		
Haematuria	☐		

B. CENNEER: INCREASED ☐ DECREASED ☐

INCREASED OON (MUSLE)		DECREASED OON (MUSLE)	
Cervical lymphadenitis	☐	Impairment of sense organs	☐
Vernical ulcer	☐	Joint pain	☐
Tumour in face ,abdomen, thigh, genitalia	☐	Jaw, thigh and genitalia gets shortened	☐
Hyper muscular in the cervical region	☐		

C. OON: INCREASED ☐ DECREASED ☐

INCREASED KOZHUPPU (ADIPOSE TISSUE)		DECREASED KOZHUPPU (ADIPOSE TISSUE)	
Cervical lymph adenitis	☐	Pain in the hip region	☐
Vernical ulcer	☐	Disease of the spleen	☐
Tumour in face, abdomen, thigh, genitalia	☐		
Hyper muscular in the cervical region	☐		
Dyspnoea	☐		
Loss of activity	☐		

D. KOZHUPPU: INCREASED ☐ DECREASED ☐

INCREASED ENBU (BONE)	DECREASED ENBU (BONE)
Growth in bones and teeth ☐	Bones diseases ☐ Loosening of teeth ☐ Nails splitting ☐ Falling of hair ☐

E. ENBU: INCREASED ☐ DECREASED ☐

INCREASED MOOLAI (BONE MARROW)	DECREASED MOOLAI (BONE MARROW)
Heaviness of the body ☐ Swollen eyes ☐ Swollen phalanges chubby fingers ☐ Oliguria ☐ Non healing ulcer ☐	Osteoporosis ☐ Sunken eyes ☐

F. MOOLAI: INCREASED ☐ DECREASED ☐

INCREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)	DECREASED SUKKILAM/SURONITHAM (SPERM OR OVUM)
Infatuation and lust towards women / men ☐ Urinary calculi ☐	Failure in reproduction ☐ Pain in the genitalia ☐

G. SUKKILAM/SURONITHAM: INCREASED ☐ DECREASED ☐

[9] MUKKUTRA MIGU GUNAM

I. Vali Migu Gunam	**1. Present**	**2. Absent**
1. Emaciation	☐	☐
2. Complexion – blackish	☐	☐
3. Desire to take hot food	☐	☐
4. Shivering of body	☐	☐
5. Abdominal distension	☐	☐
6. Constipation	☐	☐
7. Insomnia	☐	☐
8. Weakness	☐	☐
9. Defect of sense organs	☐	☐
10. Giddiness	☐	☐
11. Lake of interest	☐	☐

II. Pitham Migu Gunam	**1. Present**	**2. Absent**
1. Yellowish discolouration of skin	☐	☐
2. Yellowish discolouration of the eye	☐	☐
3. Yellow coloured urine	☐	☐
4. Yellowishness of faeces	☐	☐
5. Increased appetite	☐	☐
6. Increased thirst	☐	☐
7. Burning sensation over the body	☐	☐
8. Sleep disturbance	☐	☐

III. Kapham migu gunam **1. Present** **2. Absent**

1. Increased salivary secretion ☐ ☐
2. Reduced activeness ☐ ☐
3. Heaviness of the body ☐ ☐
4. Body colour – fair complexion ☐ ☐
5. Chillness of the body ☐ ☐
6. Reduced appetitie ☐ ☐
7. Eraippu ☐ ☐
8. Increased sleep ☐ ☐

[10]**. NOIUTRA KALAM**

1. Kaarkaalam (Aug15-Oct14) ☐ 2.Koothirkaalam (Oct15-Dec14) ☐
3. Munpanikaalam (Dec15-Feb14) ☐ 4.Pinpanikaalam (Feb15-Apr14) ☐
5. Ilavanirkaalam (Apr15-June14) ☐ 6.Muthuvenirkaalam (June15-Aug14) ☐

[11]**. NOI UTRA NILAM**

1. Kurunji (Hilly terrain) ☐ 2. Mullai (Forest range) ☐ 3. Marutham (Plains) ☐
4. Neithal (Coastal belt) ☐ 5. Paalai (Desert) ☐

[12].Date of Birth ☐☐ ☐☐ ☐☐☐☐

[13]. Time of Birth ☐ AM ☐ PM ☐

[14]. Place of Birth: _____

Date: **P.G Scholar** **Lecturer**

ANNEXURE-IV

A STUDY ON THE SYMPTAMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

FORM-IV-LABORATORY INVESTIGATIONS

1. O.P No: _____ Lab.No_____ Serial No_____

2. Name: _____

3.Date of birth : | | | | | | | | |
D D M M Y E A R

4. Age : _____ years

5. Date of assessment: _____

BlOOD

1. TC _____ Cells/cu mm

2. DC
P___% L _____% E _____% M _____% B_____%

3. Hb _____ gms%

4. ESR At 30 minutes _____ mm At 60 minutes _____mm

5. Blood Sugar-F_____mgs%

6. Blood Sugar-PP _____mg%

7. Serum Cholesterol _____mgs %

8. HDL _____ mgs%

9. LDL _____mgs%

10. Triglycerides _____mgs%

11. Blood Urea _____mgs%

12. Serum Creatinine _____mgs%

URINE

1. Neerkuri _____
2. Neikuri _____
3. Sugar F&PP _____
4. Albumin _____
5. Deposits _____

MOTION

1. Ova
2. Cyst
3. Occult blood

SPECIAL INVESTIGATION

1. **COLONOSCOPY**

Date : **P.G Student** **Lecturer**

ANNEXURE –V

A STUDY ON THE SYMPTAMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

FORM V- PATIENT INFORMATION SHEET

PURPOSE OF RESEARCH AND BENEFITS:

The diagnostic research study in which your participation is proposed to assess the diagnostic methods in Siddha methodology in VANNI PITHAM patients. Knowledge gained from this study would be of benefit to patients suffering from such conditions for the diagnosis and prognosis.

STUDY PROCEDURE:

You will be interviewed and examined as OP and IP patients at the study centre. At the first visit the physician will conduct a brief physical examination and assess the condition followed by Envagai thervu and routine blood and urine analysis. After matching the inclusion criteria you will be included in this study and you will be examined on the basis of Envagai thervu.

POSSIBLE RISK:

During this study there may be a minimum pain to you while drawing blood sample.

CONFIDENTIALLITY:

Your medical records will be treated with confidentiality and will be revealed only to other doctors / scientists. The results of this study may be published in a scientific journal, but you will not be identified by your name.

YOUR PARTICIPATION AND YOUR RIGHTS:

Your participation in this study is voluntary and you may be withdrawn from this study anytime without having to give reasons for the same. You will be informed about the findings that occur during the study. If you do agree to take part in this study, your health record will need to made available to the investigators. If you don't wish to participate at any stage, the level of care you receive will in no way to be affected.

The Ethics committee cleared the study for undertaking at OPD and IPD, NIS. Should any question arise with regards to this study you contact following person

P.G student:
Dr.B.K.Priya
Department of Noi Naadal
National Institute of Siddha
Chennai-600 047.

தேசிய சித்த மருத்துவ நிறுவனம், சென்னை-47.

நோய் நாடல் துறை

"**வன்னி பித்தம்**" நோய் கணிப்பு முறை மற்றும் குறிகுணங்களை பற்றிய ஓர் ஆய்வு"

நோயாளியின் தகவல் படிவம்

ஆய்வின் நோக்கமும் பயனும்:

தாங்கள் பங்கேற்க்கும் - வ்வாய்வு "**வன்னி பித்தம்** நோய் கணிப்பு முறை மற்றும் குறிகுணங்களை பற்றிய ஓர் ஆய்வு" சித்த மருத்துவ முறையில் நோயை கணிப்பதற்கான ஓர் ஆய்வுமுறை. - வ்வாய்வு தங்களின் நோய்கணிப்பை பற்றியும் நோயின் போக்கை பற்றியும் அறிய உதவும்.

ஆய்வு முறை:

தாங்கள் நேர்காணல் மற்றும் பரிசோதனைகளின் மூலம் உள்நோயாளி, வெளிநோயாளி பிரிவில் ஆய்வு செய்யப்படுவீர்கள். முதல் நேர்காணலின்போது ஆய்வாளரால் உடல் பரிசோதனை, நீர், - ரத்தம், மற்றும் மலம் பரிசோதனை செய்து குறிப்பிட்ட குறிகுணங்கள் - ருப்பின் - வ்வாய்விற்காக எடுத்துக்கொள்ளப்படுவீர்கள்.

நேரும் உபாதைகள்:

- வ்வாய்வில் - ரத்த பரிசோதனைக்காக - ரத்தம் எடுக்கும்போது சிறிதளவு வலி ஏற்படலாம்.

மந்தணம் :

தங்களின் மருத்துவ ஆவணங்கள் அனைத்தும் மருத்துவர், ஆய்வாளர் அல்லாத பிறரிடம் தெரிவிக்கப்படமாட்டாது.

நோயாளியின் பங்களிப்பும் உரிமைகளும்:

- வ்வாய்வில் தங்களின் பங்கேற்பு தன்னிச்சையானது. - வ்வாய்வில் தாங்கள் ஒத்துழைக்க - யலவில்லையெனில் எப்பொழுது வேண்டுமானாலும் காரணம் எதுவும் கூறாமல் விலகிக்கொள்ளலாம். - வ்வாய்வின்போது அறியப்படும் தகவல்கள் தங்களுக்கு தெரிவிக்கப்படும். நோயாளியின் ஒப்புதலுக்கிணங்க நோய்கணிப்பு விவரங்களை ஆய்வாளர் பயன்படுத்திக்கொள்வார். நோயாளி ஆய்வினிடையே ஒத்துழைக்க மறுத்தாலும் எந்த நிலையிலும் நோயாளியை கவனிக்கும் விதம்

பாதிக்கப்பட மாட்டது. நிறுவன நெறிமுறை குழுமம் (Institutional Ethical committee) மேற்கண்ட ஆய்வினை மேற்கொள்ள ஒப்புதல் அளித்துள்ளது.

ஆய்வு குறித்த சந்தேகங்கள் - ருப்பின் கீழ்கண்ட நபரை தொடர்பு கொள்ளவும்.

பட்டமேற்படிப்பாளர் :

மரு. **பு .கி .பிரியா**

நோய் நாடல் துறை
தேசிய சித்த மருத்துவ நிறுவனம்,
சென்னை-47.
மின் அஞ்சல் – bkpriya80@gmail.com
தொலைபேசி எண்- 8056898585

A STUDY ON THE SYMPTAMATOLOGY AND DIAGNOSTIC METHODOLOGY OF VANNI PITHAM

FORM VI - INFORMED WRITTEN CONSENT FORM

I ……..exercising my free power of choice, hereby give my consent to be included as a subject in the diagnostic trial entitled " A study on "VANNI PITHAM". I may be asked to give urine and blood samples during the study.

I have been informed about the study to my satisfaction by the attending investigator about the purpose of this trial, the nature of study and the laboratory investigations. I also give my consent to publish my study results in scientific conferences and reputed scientific journals for the betterment of clinical research.

I am also aware of my right to opt out of the trial at any time during the course of the trial without having to give the reasons for doing so.

Signature /thumb impression of the patient :

Date :

Name of the patient :

Signature of the investigator :

Date :

Head of the Department :

தேசிய சித்த மருத்துவ நிறுவனம், சென்னை-47.

நோய் நாடல் துறை

"வன்னி பித்தம்" நோய் கணிப்பு முறை மற்றும் குறிகுணங்களை பற்றிய ஓர் ஆய்வு"

ஒப்புதல் படிவம்

ஆய்வாளரால் சான்றளிக்கப்பட்டது

நான் - ந்த ஆய்வை குறித்த அனைத்து விபரங்களையும் நோயாளிக்கு புரியும் வகையில் எடுத்துரைத்தேன் என உறுதியளிக்கிறேன்.

தேதி : கையொப்பம்:

- டம் :

பெயர் :

நோயாளியின் ஒப்புதல்

நான், என்னுடைய சுதந்திரமாக தேர்வு செய்யும் உரிமையைக் கொண்டு - ங்கு தலைப்பிடப்பட்ட "வன்னி பித்தம்" நோயை கணிப்பதற்கான மருத்துவ ஆய்விற்கு என்னை உட்படுத்த ஒப்புதல் அளிக்கிறேன்.

என்னிடம் - ந்த மருத்துவ ஆய்வின் காரணத்தையும், மருத்துவ ஆய்வுக்கூட பரிசோதனைகள் பற்றி திருப்தி அளிக்கும் வகையில் ஆய்வு மருத்துவரால் விளக்கிக் கூறப்பட்டது.

நான் - ந்த மருத்துவ ஆய்வின் போது காரணம் எதுவும் கூறாமல், எப்பொழுது வேண்டுமானாலும் - ந்த ஆய்விலிருந்து என்னை விடுவித்து கொள்ளும் உரிமையை தெரிந்திருக்கின்றேன்.

தேதி :

- டம்: கையொப்பம் :

பெயர் :

தேதி : சாட்சிக்காரர் கையொப்பம் :

- டம்: பெயர் :

உறவுமுறை :

NATIONAL INSTITUTE OF SIDDHA- राष्ट्रीय सिद्ध संस्थान
Ministry of AYUSH- आयुष मंत्रालय
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फोन\Tele : 044-22411611
फैक्स\Fax : 22381314
ईमेल: nischennaisiddha@yahoo.co.in
वेब :www.nischennai.org

F.No.NIS/6-20/IEC/15-16

Dt: 14.10.2016

CERTIFICATE

Address of Ethics Committee: National Institute of Siddha, Tambaram Sanatorium, Chennai-600047, Tamil Nadu, India	
Principal Investigator: Dr. B.K.Priya – I year, Dept.of Noi Naadal	
Protocol Title:- A Study on the Symptomatology and Siddha Diagnostic Methodology of Vanni Pitham.	
Documents filed	1) Protocol, 2) Data Collection forms
Clinical trial Protocol (others – Specify)	Yes-(M.D-Dissertation)
Informed consent documents	Yes
Any other documents	-
Date of IEC approval & its number	NIS/IEC/2016/11-26/ 14.10.2016

We approve the trial to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study, any SAE occurring in the course of the study.

(Dr.V.Subramanian)
Chairman

NATIONAL INSTITUTE OF SIDDHA ★ CHENNAI 600 047

V. Banumathi 14/10/16

(Prof.Dr.V.Banumathi)
Member Secretary

The Tamil Nadu Dr.M.G.R.Medical University

69, Anna Salai, Guindy, Chennai - 600 032.

This Certificate is awarded to Dr/Mr/Mrs.....PRIYA. B.K.....

For participating as ~~Resource Person~~ / Delegate in the Twenty First Workshop on

"RESEARCH METHODOLOGY & BIOSTATISTICS"

For ***AYUSH Post Graduates & Researchers***

Organized by the Department of Siddha

The Tamil Nadu Dr. M.G.R. Medical University From 25th to 29th April 2016.

Dr.N.KABILAN, MD(S).
PROF & HEAD
DEPT.OF SIDDHA

Prof.**Dr.P.ARUMUGAM,** M.D.,
REGISTRAR i/c

Prof. **Dr.S.GEETHALAKSHMI,** M.D., Ph.D.,
VICE CHANCELLOR

DEPARTMENT OF PATHOLOGY, KILPAUK MEDICAL COLLEGE, CHENNAI-10.

HISTOPATHOLOGY REPORT

Name: Seethaiveethi Age: 31/F Sex: M/F Hosp. No.: 917/17

HPE No.: 502/17. Unit: DDHD.

Clinical Diagnosis: ? crohn's disease.

Macroscopic: Received multiple grey white soft tissue (10) 0.2cc

Microscopic: Section studied shows ulcerated duodenal mucosal with underlying lamina propria showing dense lymphomacrotic infiltr

Impression: chronic nonspecific inflammatory patho

Professor
Department of Pathology
Prof. of Pathology.

Date: 16/9/17

GCP—162-6—25,000 Cps. 15-11-2016 [HCL-11]

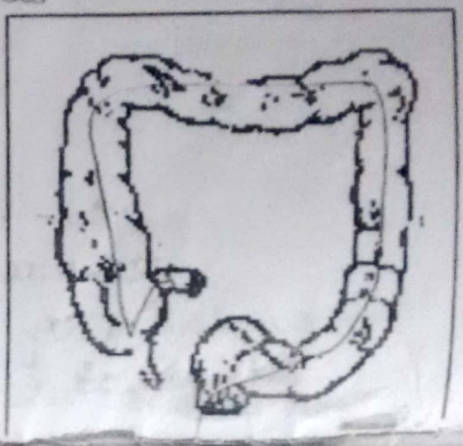
Department of Medical Gastroenterology
Government General Hospital
Madras Medical College, Chennai - 600 003

Name : Saraswathy
IP No. : 18709
Age / Sex : 31/F
GE No. : 39926
Ref. By : ward 245
Endoscopy No. : 95/17.
Date 22/2/17
GE I / II :

D/B: A. Sabari / A xiii

Lower Gastrointestinal Endoscopy Report

Instrument : Pediatric
PreMedication :
Brief Clinical Presentation : ? R/o IBD



P / R NAD
Preparation : fair.
Passed Upto : distal 10cm g Terminal Ileum
↓ Normal.
Caecum :
Ascending colon :
Hepatic flexture :
Transverse colon : Normal mucosal & vascular pattern
Splenic flexture :
Descending colon : Present. Multiple Random biopsies taken.
Sigmoid colon :
Rectm :
Anal canal :

Final Impression: Normal Study

Bx NO:

Bx: NO: 1661
22/02/17

Medical Officer

252-25|P3-1|

Department of Medical Gastroenterology
Government General Hospital
Madras Medical College, Chennai - 600 003

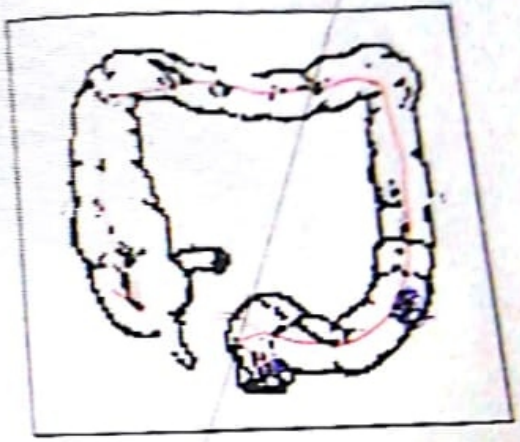
Name: Dinesh
Age / Sex: 27/M
Ref By: Dr.
Date: 18/Jan/17

IP No: 8565
CR No:
Endoscopy No:
OP / IP: 27/1/16

Instrument:

Brief Clinical Presentation: Bleeding PR
5 months

PreMedication: Inj Thiopental 1 mg IV



P / R: Nad

Preparation:

Passed Upto: Caecum

Caecum:

Ascending colon:

Hepatic flexture:

Transverse colon:

Splenic flexture:

Descending colon:

Sigmoid colon: → In 22cm Erythema - superficial ulceration seen

Rectum: → Small superficial ulcerin seen

Anal canal:

Bx taken

Rt

Final Impression:

Procto sigmoiditis.

Medical Officer

20/1/17
Bx. no 418
13/1/17

52-25(P3-11)

VIJAYA HEALTH CENTRE

NO, 323, N.S.K. SALAI, CHENNAI - 600 026 Phone 2481 4291
2481 4283
WEBSITE : www.vijayahealthcentre.org

DEPARTMENT OF ENDOSCOPY

NAME :Mr. SANJEEVI PATIENT ID: 1287 836 AGE
REF BY:DR. SATISH REDDY,M.S.,M.CH SEX : MALE DATE

VIDEO COLONOSCOPY

Anal Canal, rectum, rectum carefully visualised

Mucosa of the sigmoid colon, proximal rectum appears hyperaemic and oedematous
Ulceration seen in the proximal rectum ,recto sigmoid junction and sigmoid colon
Endoscopic appearence is suggestive of colitis

IMPRESSION

Ulcerative Colitis

Dr. SATISH REDDY M.S.
Reg No:37248